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ABSTRACT

This curriculum guide, updated from the Iowa 1973 version, is geared to vocational and technical agriculture instructors, to meet their needs in planning and conducting instructional programs for their students. Students completing instruction in agricultural supplies and services should have (1) explored the field of agricultural supplies and services occupations and made tentative career choices; and (2) developed attitudes, competencies, and job skills needed for successful job entry or employment in these fields. The guide is organized into seven units, covering the following subjects: opportunities in agricultural supplies and services, human relations, sales, business records and procedures, organization and operation of agricultural businesses, product knowledge of agricultural supplies, and laws and regulations affecting agricultural businesses. The units are organized around a problem-solving approach to lesson planning. Each unit is divided into a series of problems, and each problem area features study questions, reference materials, interest approach, learning activities, conclusion, evaluation criteria, and optional learning activities. Keys, information sheets, and transparency masters are included for use in conducting the learning activities suggested. A list of occupational titles and tips on evaluating progress in the course also are included in the publication. (KC)

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CURRICULUM GUIDE
AND
INSTRUCTIONAL MATERIALS
IN
AGRICULTURAL SUPPLIES AND SERVICES

A joint publication of:

IOWA STATE UNIVERSITY
of Science and Technology
Department of Agricultural Education
Ames, Iowa 50010

and

DEPARTMENT OF PUBLIC INSTRUCTION
Career Education Division
Grimes State Office Building
Des Moines, Iowa 50319

1981

CE 030 251

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SOURCE OF CURRICULUM GUIDES

The following ten publications in agribusiness and natural resources were made available by the Iowa Department of Public Instruction, Grimes State Office Building, Des Moines, Iowa 50319:

Curriculum Guide in Agribusiness and Natural Resource Education

Curriculum Guide in Animal Science

Curriculum Guide in Agronomic Science

Curriculum Guide in Agricultural Mechanics

Curriculum Guide in Farm Business Management

Curriculum Guide and Instructional Materials in Agricultural Supplies and Services

Curriculum Guide in Agricultural Products Processing and Distribution

Curriculum Guide in Horticulture

Curriculum Guide in Agricultural Resources and Conservation

Curriculum Guide in Occupational Experience in Agriculture

FOREWORD

This publication is a revision of the Iowa Agricultural Supplies and Services Curriculum Guide developed in 1973, for use by vocational and technical agriculture instructors in planning and conducting instructional programs to meet the needs of their students. The revision involved three major points: 1. The subject matter content was updated where appropriate to reflect trends and changes in agricultural supplies and services. 2. The organization of the guide was revised to be compatible with the curriculum materials being developed under the auspices of Project 2000. 3. Instructional materials were developed to complement the guide.

These materials should serve as a source of ideas and teaching materials for instructors at the secondary and post-secondary levels to use in organizing courses tailored to the needs of students at their respective institutions. The units and problem areas may be expanded or contracted to accommodate programs with nine-week, semester, or year-long courses, or incorporated into existing courses. Although much of the material is designed for use at the secondary or post-secondary levels, many of the materials may be introduced at the awareness or exploratory levels of career education.

The materials are organized around a problem-solving approach to lesson planning. The subject matter in each unit is introduced as a series of problems which a student would want to investigate while preparing for entry in an agricultural supplies and services occupation. Study questions, learning activities and evaluation criteria have been suggested for each problem area. Instructional materials have been developed and included in the guide for many of the problem areas.

Titles of occupations requiring competencies in agricultural supplies and services have been included. It is assumed that only partial attainment of some competencies can be achieved at the secondary level. The competencies may not be fully mastered until the student has completed additional preparation at the post-secondary, young or adult class, or collegiate levels. It is assumed that "hands on" and occupational experience will be provided with class and laboratory instruction at all levels.

Evaluation of the instruction in agricultural supplies and services should be based largely upon attainment and application of competencies as students participate in occupational experience programs.

Allocations of units and of instructional time in courses at the secondary level are presented in the curriculum guide titled, Agribusiness and Natural Resource Education. Also presented are suggested activities involving agricultural supplies and services for teachers at the kindergarten through sixth grade level, and suggested outlines of subject matter to be included in exploratory programs at the junior high school level.

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ACKNOWLEDGEMENTS

This publication represents the efforts of a project team and reflects cooperation between individuals and agencies. The revised guide has drawn heavily from the 1973 curriculum guide, which was the result of the pooling of knowledge, experience, and much research of curriculum development in other states by 22 vocational agriculture teachers enrolled in Ag Ed 593D, Workshop in Curriculum Development in Agribusiness and Natural Resources during June of 1973. Participants in the 1973 workshop were:

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This publication was developed by the Agricultural Education Department at Iowa State University under a grant from the Iowa State Department of Public Instruction, Career Education Division.

OCCUPATIONAL TITLES

AGRICULTURAL SUPPLIES AND SERVICES

Instructional programs based upon content in this guide will prepare individuals for job entry, will upgrade occupational skills, or will prepare the learner for further occupational preparation. Agricultural supplies and services include feed, fertilizer, chemicals, seeds, animal health products, petroleum and related products, hardware, lumber, farm machinery and other equipment, agricultural finance services, farm management consulting services, farm data processing services, integrated pest management consulting services, and animal health services. Below is a partial listing of occupational titles in agricultural supplies and services.

Farm Supply Center Manager
Farm Supply Production Manager
Farm Supply Sales Manager
Farm Supply Service Manager
Farm Supply Office Manager
Farm Supply Company Research and Development Director
Farm Supply Center Bookkeeper
Farm Supply Salesperson
Farm Supply Service Representative
Farm Supply Equipment Operator
Farm Supply Warehouse Person
Farm Supply Center Delivery Person
Farm Supply Center Sales Clerk
Farm Supply Center Stock Clerk
Feed Mill Employee
Petroleum and Related Products Route Salesperson
Agricultural Chemical Field Representative
Farm Supply Center Worker
Parts Person
Grain Elevator Worker
Grain Grader
Grain Inspector
Feed Specialist
Seed Technician
Animal Health Supply Salesperson
Veterinarian's Assistant
Integrated Pest Management Consultant
Integrated Pest Management Scout
Pest Exterminator
Weed Inspector
Grain Hauling Contractor
Grain Hauler
Custom Pesticide Applicator
Agricultural Loan Officer
Farm Management Consultant
Public Relations Specialist
Computer Programmer for Agricultural Applications
Computer Salesperson for Agricultural Applications
Farm Supply Order Clerk
Route Salesperson
Pet Center Sales Clerk

AGRICULTURAL SUPPLIES AND SERVICES

GENERAL OBJECTIVES

Students completing instruction in agricultural supplies and services will have:

1. Explored the field of agricultural supplies and services occupations and made tentative career choices.

2. Developed those attitudes, competencies, and job skills needed for successful job entry or employment in an agricultural supplies and services occupation.

ORGANIZATION OF MATERIALS

UNIT TITLE	UNIT CODE	COLOR CODE
OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES	OP	GREEN
HUMAN RELATIONS	HR	GOLDENROD
SALES	SA	BLUE
BUSINESS RECORDS AND PROCEDURES	BP	SALMON
ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES	OB	CHERRY
PRODUCT KNOWLEDGE OF AGRICULTURAL SUPPLIES	PK	CANARY
LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES	LR	PINK

The units are organized around a problem-solving approach to lesson planning. Each unit is divided into a series of problems. Each problem area features study questions, reference materials, interest approach, learning activities, conclusion, evaluation criteria, and optional learning activities. Learning activities (ACT), keys, information sheets (INFO) and transparency masters (TM) are included for use in conducting the learning activities suggested. These materials are labeled with the unit code, problem number, type of material (ACT, INFO, or TM), and sequence number within the problem area. The units are color coded as indicated above for easier reference. All of the instructional materials, however, are printed on white paper for clear reproduction. Some problem areas and units are more complete than others. This is not intended to be a reflection of importance, but only a result of time limitations in developing the revised guide.

It should be noted that these materials are not intended to replace an individual instructor's daily lesson plans. These materials are intended to supplement instruction and aid in planning.

Learning activities outlined in each problem area are only suggestions and should be regarded as such. Revisions of these activities by instructors are expected to accommodate the individual needs and differences of the students. Study questions, references and evaluation criteria may be added or deleted in adapting these materials to student needs.

EVALUATION

1. Pre-tests should be given to determine the student's competence level at time of entry in as many of the courses as possible. This would permit the exceptional student (especially at the post-secondary level) to test out of the course and identify the student with a low test score who may need individual instruction. There would be some exceptions. For example, all students should make an oral sales presentation.

2. A score sheet may be used to evaluate oral and written presentation. The instructor uses the checklist in evaluating how adequately the student presented the nature of the work, jobs available, advancement opportunities, working conditions, average salary and fringe benefits concerning the job of his choice in the Opportunities in Agricultural Supplies and Services Unit. These score sheets would be used in appropriate forms for other competencies such as sales presentations, informative speeches, and reports on human relations activities.

3. Students may be evaluated on class participation, interest, attendance, and participation.

4. Displays and bulletin board arrangements may be constructed by students and be evaluated.

5. Students may be given a pass-fail type of test on much of the Human Relations Unit. Example: They would meet standards established by the instructor or do further study and repeat the test.

6. Much emphasis in evaluation should be placed on the actual skills and jobs performed by the students. Criteria could include speed, accuracy, neatness, creativity, and approved practices followed when arranging a product display, designing a newspaper ad, or writing a business letter. They could be rated on speed and accuracy and, in some cases, neatness when operating adding machines, cash registers, and moisture testers; making out sales tickets; pricing merchandise; and filling out a purchase order.

7. The teacher and employer should evaluate students on their performance during on-the-job training.

8. Written tests would be used to evaluate students' performance in some of the subject matter areas.

9. A team of community people should be invited to the school to evaluate the students and the program. The Iowa Standards for Quality Vocational Programs in Agricultural Education could be used in the evaluation process.

10. The final criterion in evaluation should be the job success of the student graduate. This may be done through follow-up surveys of the graduates and their employers.

UNIT: OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES (OP)

Problem Areas Included:

OP-I. What are the opportunities in the feed and grain industry?

OP-II. What are the opportunities in chemical, fertilizer and seed sales and service?

OP-III. What are the opportunities in the animal health industry?

OP-IV. What are the opportunities in farm equipment, hardware, lumber, petroleum and TBA sales and services?

References used in this unit:

1. Atherton and Murphrey. 1969. Essential Aspects of Career Planning and Development. Interstate Printers and Publishers, Danville, Illinois.
2. Hoover, Norman K. 1969. Handbook of Agricultural Occupations. Interstate Printers and Publishers, Danville, Illinois.
3. McClay, David R. 1978. Identifying and validating essential competencies needed for entry and advancement in major agriculture and agribusiness occupations. U.S. Government Printing Office, Washington, D.C.
4. Stone, Archie A. Careers in Agribusiness and Industry.
5.
6.

UNIT: OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES

PROBLEM I - What are the opportunities in the feed and grain industry?

Study Questions:

1. What are the main occupations in the feed and grain industry?
2. What type of education and skills are needed to enter the feed and grain industry?
3. What are the advancement opportunities, working conditions, salary and fringe benefits of main occupations in the feed and grain industry.
4.
5.
6.

References:

1. Careers in Agribusiness and Industry, Archie A. Stone, Chapter 7 and 8.
2. Handbook of Agricultural Occupations, Norman K. Hoover, Chapter 10.
3. McClay, David R., 1978. Identifying and validating essential competencies needed for entry and advancement in major agriculture and agribusiness occupations. U.S. Government Printing Office, Washington, D.C.

Instructional Materials:

1. OP-I-INFO-1, Field Trip Procedure
2. OP-I-TM-2, What Qualifications do I need for an Occupation in the Feed and Grain Industry?
3. OP-I-INFO-3, Grain Processors and Manufacturers

Interest Approach: A field trip planned by the students. Let the students use INFO-1 to plan a field trip to a business where they can observe and ask questions of people that work in the feed and grain industry.

Evaluate and summarize the educational experience after the trip by directing the following activities:

1. Discuss questions raised by the students prior to and during the trip.
2. Review literature accumulated during the field trip.
3. Draw conclusions concerning career opportunities at the business.
4. Identify ways that students may acquire additional information on selected occupations.

Learning Activities:

1. Split the class into two groups and have one group make a list of skilled labor occupations in the feed and grain industry. The other group should make a list of unskilled occupations in the feed and grain industry.
2. Discuss the advantages and disadvantages of the skilled labor and the unskilled occupations in small groups. Then have a spokesperson from each group present the pros and cons to the class.
3. Discuss what qualifications and abilities are needed for an occupation in the feed and grain industry using TM-2.
4. Using INFO-3 discuss the three main divisions of grain processors and manufactures: food processors (millers), animal feed manufacturers, and manufacturers who make industrial materials from grain.

Conclusion: Identify the characteristics of different opportunities in the feed and grain industry. (Have each student develop a plan that will help them in attaining their occupational goal.)

Evaluation: As a result of this lesson, students should be able to:

1. Identify the different skills needed to work in the feed and grain industry.
2. Recognize the advantages and disadvantages of different occupations.
3. Identify the three main divisions of the grain processors and manufacturers.

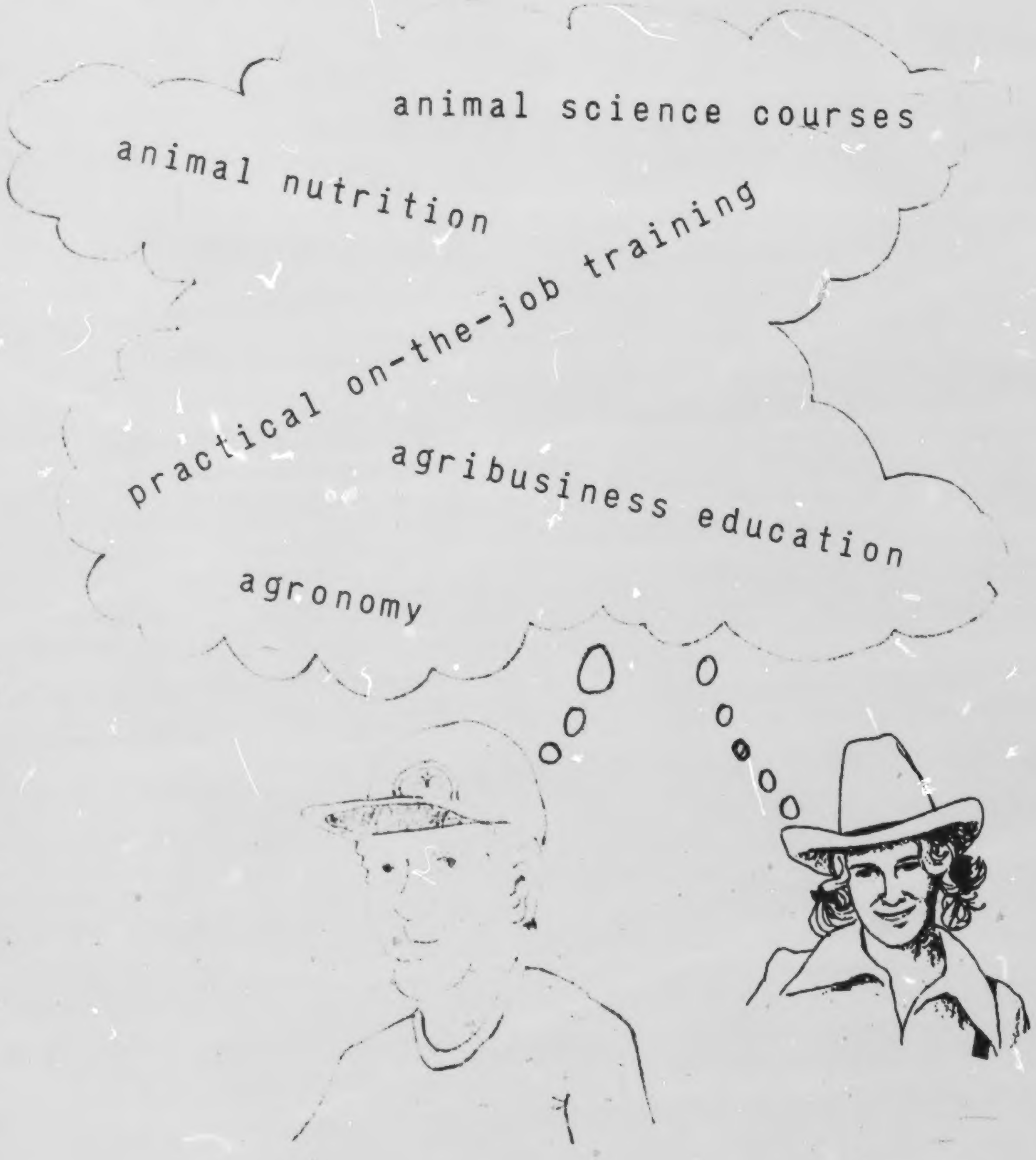
Optional Learning Activities:

1. Students list the feed and grain businesses handling feed and grain in the community.

FIELD TRIP PROCEDURE

The purpose of this activity is to let the students develop an appreciation and understanding of a business firm and its employees by securing information at its source.

1) Select an agricultural business firm for the field trip, using the following selection criteria: the business offers a variety of feed and grain services, the business employs several people with different job titles, and the management is available, capable, and cooperative.
2) Arrangements should be made with the school administration and with authorities of the place to be visited.
3) Prepare questions to be asked during the field trip. Student questions may include the following:
    a) What are the duties of employees with certain job titles?
    b) What are the qualifications for entry into various jobs in the firm?
    c) What are the employment opportunities in the firm for employees with certain job titles?
    d) What services are offered by the firm?
4) Students should take notes and ask questions at appropriate times during the field trip.


animal science courses
animal nutrition
practical on-the-job training
agribusiness education
agronomy

WHAT QUALIFICATIONS DO I NEED FOR AN OCCUPATION IN THE FEED AND GRAIN INDUSTRY?

GRAIN PROCESSORS AND MANUFACTURERS

FOOD: Food from grain comes from the flour milling and baking industries. Wheat is the principal grain used and the products reach us as flour, flour mixes, cereals, bread, and other bakery products. Corn, oats, barley, soybeans, and rye are also converted into food products and beverages.

FEED: Processing feed grains into accurately mixed formula feeds for livestock and poultry is another essential agricultural industry. Many processing plants are small enterprises serving local areas - another career possibility for those who want an occupation near home. Other plants are large, serving national and international markets. Feed manufacturing is a growing business, keeping pace with our increasing national consumption of meat, poultry, and dairy products.

INDUSTRIAL MATERIALS: Industrial materials and industrial uses of grain are very important and are increasing in number. This would be a challenging field, since much research is under way to discover new uses for grain. Some of the industrial products of grain are paper sizing, adhesives, building materials, explosives, antioridants, polymers, plasticizers, and packaging film.

UNIT: OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES

PROBLEM II - What are the opportunities in chemical, fertilizer and seed sales and service?

Study Questions:

1. What is the importance of the chemical, fertilizer and seed industry to the farmer?
2. What are the opportunities in chemical, fertilizer and seed sales and service?
3.
4.
5.

References:

1. Careers in Agribusiness and Industry, Archie A. Stone, pp 200-207.
2. Handbook of Agricultural Occupations, Norman K. Hoover, pp 137-141.

Instructional Materials:

1. OP-II-ACT-1, What are the Occupations in Chemical, Fertilizer and Seed Sales and Service?
2. OP-II-ACT-1, Key
3. OP-II-ACT-2, Occupational Requirements

Interest Approach: The students should interview a farmer to determine the dollar costs per acre of chemicals, fertilizers and seed used and the expected cost five years hence.

Learning Activities:

1. Have each student visit and talk to a person who is involved in the field of chemical, fertilizer and seed sales and service. Each student should make a presentation in front of the class about the interview.
2. Complete ACT-1. While going through the handout, describe the different occupations and give examples.
3. Discuss the importance of the chemical, fertilizer, and seed industry to the farmer. On the blackboard, figure out the effects on yields of not using chemicals, fertilizers and hybrid seed. Is it possible for a farmer to make a profit without chemicals, fertilizers, and hybrid seed?

4. Have the students determine the different kinds of jobs that are performed by employees in the chemical, fertilizer and seed sales and service business.

Conclusion: There are many opportunities in chemical, fertilizer and seed sales and service. (Have the students contact a farmer and determine the merits and the relative importance of these industries to the farmer and the world.)

Evaluation: As a result of this lesson, students should be able to:

1. Discuss the occupations available in the industry.
2. Students will be able to rank industry jobs into the groupings of unskilled, skilled or technical, sales, service and managerial or foreman.
3. Explain the nature of work, education required, jobs available, advancement opportunities, working conditions, average salary, and fringe benefits in the chemical, fertilizer and seed sales and service industry.

Optional Learning Actitivies:

1. The students should survey one or two employers to determine physical and mental job requirements in unskilled, skilled or technical sales, service and managerial or supervisory positions. ACT-2 should be filled out.
2. Students that are interested in current positions should write to: Agricultural Placement Office
College of Agriculture
118A Curtiss Hall
Iowa State University
Ames, IA 50011
This might give the students some information about current positions and the businesses they might work for.

WHAT ARE THE OCCUPATIONS IN CHEMICAL, FERTILIZER, AND SEED SALES AND SERVICE?

s e e d c o m p a n y f o r e m a n b e u s q l o b f n

g l e u b n r z x c v r u i p l a n t m a n a g e r r s

b a r s m d d e l i v e r y p e r s o n n p o e o o b n

x b n m i e n c w p q e r g h j c v n e t r q t p t b x

m o p q e t u b n o n v e w t y u i c o p n a e d a v w

n r n e w q u i v e r v e u i p e w c q a c e t e c c p

a a q n e u i v p e w g p q c n e i s x i p q e p i n c

r t p e c m e t e s m w d n e i c m e l i c k e a a l n

s o i l t e s t e r i s e e d i n s p e c t o r r p e w

b r i e s c e t s i n e s o e n r p s l o x s e t p w q

x y e o c i c e t y i s s e s s a t g e h e e l m a n m

e t m c i s r e e l e v a t o r e m p l o y e e e e n w

e e n w i e e k s t o e c n e o r e w m y d d v n d o u

n c w r i d y d w o d c s z e n t i s o c n a a t i c v

k h e c u s u v n e s s i l c i t h e e s a n t f c n m

p n e c r b b n c s a l e s m a n a g e r s a o o i v a

n i m w o d d n e e i n e s e m a n e n e s l r r t n i

e c n e t s e e d t e c h n i c i a n e r t y s e s n v

u i s s a e e w r u c n r c t i c i a n r e s a m e w c

q a r e r w s e w u s c e w o c r e s c e t t l a p m c

e n w c e r f i e l d p e r s o n r x l e w o e n p q x

v n e t p m q n e l d c o e w u c e t c o c e s m k l p

s e o c o c o t e c t e s e s e e d s a l e s m a n i u

e f t t d c t k s s e e d t e c h n i c i a n a m v b i

x x s n n i w o p e w s c t i t n a m e n e i n m v e w

u u s e a s e e d c o m p a n y e x e c u t i v e s n e

c u s w l o c o v e w u c u t u c w x c e t o c i n e i

WHAT ARE THE OCCUPATIONS IN CHEMICAL, FERTILIZER, AND SEED SALES AND SERVICE?

```
s e e d c o m p a n y f o r e m a n b e u s q l o b f n
g l e u b n r z x c v r u i p l a n t m a n a g e r r s
b a r s m d d e l i v e r y p e r s o n n p o e o o b n
x b n m i e n c w p q e r g h j c v n e t r q t p t b x
m o p q e t u b n o n v e w t y u i c o p n a e d a v w
n r n e w q u i v e r v e u i p e w c q a c e t e c c p
a a q n e u i v p e w g p q c n e i s x i p q e p i n c
r t p e c m e t e s m w d n e i c m e l i c k e a a l n
s o i l t e s t e r i s e e d i n s p e c t o r r p e w
b r i e s c e t s i n e s o e n r p s l o x s e t p w q
x y e o c i c e t y i s s e s s a t g e h e e l m a n m
e t m c i s r e e l e v a t o r e m p l o y e e e e n w
e e n w i e e k s t o e c n e o r e w m y d d v n d o u
n c w r i d y d w o d c s z e n t i s o c n a a t i c v
k h e c u s u v n e s s i l c i t h e e s a n t f c n m
p n e c r b b n c s a l e s m a n a g e r s a o o i v a
n i m w o d d n e e i n e s e m a n e n e s l r r t n i
e c n e t s e e d t e c h n i c i a n e r t y s e s n v
u i s s a e e w r u c n r c t i c i a n r e s a m e w c
q a r e r w s e w u s c e w o c r e s c e t t l a p m c
e n w c e r f i e l d p e r s o n r x l e w o e n p q x
v n e t p m q n e l d c o e w u c e t c o c e s m k l p
s e o c o c o t e c t e s e s e e d s a l e s m a n i u
e f t t d c t k s s e e d t e c h n i c i a n a m v b i
x x s n n i w o p e w s c t i t n a m e n e i n m v e w
u u s e a s e e d c o m p a n y e x e c u t i v e s n e
c u s w l o c o v e w u c u t u c w x c e t o c i n e i
```

OCCUPATIONAL REQUIREMENTS

1) The job title is ______________________________________.

2) What group is the job in: unskilled, skilled or technical, sales, service, managerial or supervisor. (circle one)

3) List the physical requirements for the occupation.

   a)

   b)

   c)

   d)

   e)

4) List the mental requirements for the occupation.

   a)

   b)

   c)

   d)

   e)

UNIT: OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES

PROBLEM III - What are the opportunities in the animal health industry?

Study Questions:

1. What are the opportunities in the animal health industry?
2. What are the factors involved in successful employment in the animal health industry?
3.
4.
5.

References:

1. Handbook of Agricultural Occupations, Norman K. Hoover, pp 107-157.
2. Essential Aspects of Career Planning and Development, Atherton and Murphrey, pp 17-44.
3.
4.

Instructional Materials:

1. OP-III-TM-1, Keys to Successful Employment
2. OP-III-ACT-2, Two Careers of Interest
3. OP-III-INFO-3

Interest Approach: Split the class into three groups. Have each group construct a chart or photo-essay showing the product, what disease or condition it is used for, how it is used and the cost of the product. (These charts could be used for other units in animal health.)

Learning Activities:

1. List the animal health products that are sold for swine, cattle and sheep.

2. Ask a student who works part-time in the animal health industry to discuss what he thinks are the most important factors involved in successful employment. If this is not possible, ask an animal health industry employer. TM-1 might be used as a conclusion.

3. Using the handout ACT-2, have each student report on the nature of work, education required, number of jobs available, advancement opportunities, working conditions, average salary and fringe benefits of two of the jobs in which the student is most interested.

4. Have each student bring in a label from an animal health product. Talk about the products and discuss the importance of knowing about the product if you were working within the industry.

Conclusion: There are many opportunities in the wholesale, retail and service aspects of the animal health industry.

Evaluation: As a result of this lesson, students should be able to:

1. Describe the opportunities available in the animal health industry in the community.

2. List the factors involved in a successful career.

3. List the opportunities available in the wholesale, retail and service aspects of the animal health industry.

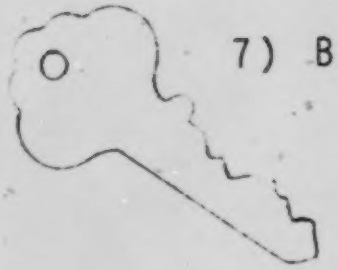
Optional Learning Activities:

1. On the blackboard list the opportunities available in wholesale, retail and service aspects of the animal health industry.

2. Have the students read INFO-3. This is just one example of a career in the animal health industry. This handout might help the students in planning a career.

KEYS TO SUCCESSFUL EMPLOYMENT

1) Product knowledge
2) Be punctual
3) Be dependable
4) Be a good listener
5) Be honest
6) Be neat
7) Be cooperative



TWO CAREERS OF INTEREST

Job Title		
Nature Of Work		
Education Required		
Number of Jobs Available Each Year		
Advancement Opportunities		
Working Conditions		
Average Salary		
Fringe Benefits		

VETERINARIAN'S AID

DESCRIPTION AND NATURE OF WORK - A veterinarian's aid works with a registered veterinarian. An aid helps with testing programs, inspections of livestock and premises, and routine visits to farms. He/She may assist in the operation of a small animal hospital.

An aid assists a veterinarian in inspecting auction barns, meat processing plants, and slaughter houses; holds and handles animals during injections, treatments, and operations; cleans kennels, sinks, tables, and instruments. As an aid acquires experience he/she may have office duties, such as answering the phone, making appointments, and keeping records.

WORKING CONDITIONS - The duties of a veterinarian's aid are performed under a variety of conditions. Most of the work is indoors but some jobs are done outdoors, and travel is necessary in all kinds of weather. In general, the work is done in desirable surroundings, but some of it may have to be accomplished in unsanitary, dirty areas. An aid is exposed to the odors and sights associated with the care of sick animals. The work is steady throughout the year, but the hours may be irregular because a veterinarian is on call at all times.

EDUCATIONAL AND PERSONAL QUALIFICATIONS - You will find a high school education necessary in this kind of work with emphasis on science, physiology, and health.

Specific knowledge of farm animals learned in vocational agriculture also will be a great asset. In addition to school work, you should have a livestock farm background or farm work experience. This type of of experience is necessary, if you are to assit in the treatment of sick animals intelligently. Skills in handling and restraining large animals often are required of a veterinarian's aid. Specific skills of this kind may be acquired while on the job, but beginners with experience have a distinct advantage.

A veterinarian's aid must like working with animals and must be able to work easily with other persons. Good health and physical strength are assets, but some physical handicaps will not interfere with your progress in this type of work. If your work deals with regulatory programs, you must be able to explain them in a tactful way, and have the ability to stand firm in the face of opposition.

HOW TO ENTER AND ADVANCE - A young man or woman with a good high school education and some farm experience or previous background of work with livestock can enter this occupation. The opportunities for advancement are largely by way of being given more responsibility as his knowledge of the work increases. Veterinarian's aids, with some experience, often have quite responsible and well-paying positions at kennels, stables, race tracks, and small animal hospitals.

UNIT: OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES

PROBLEM IV - What are the opportunities in farm equipment, hardware, lumber, petroleum and TBA sales and service?

Study Questions:

1. What are the opportunities in farm equipment, hardware, lumber, petroleum and TBA (tires, batteries and accessories)?
2. What responsibilities might an employee at a farm supply business have?
3. What are the four basic types of ownership and what are the advantages and disadvantages of having a career in each type of business?
4.
5.

References:

1. Handbook of Agricultural Occupations, Norman K. Hoover, pp 107-157.
2. Careers in Agribusiness and Industry, Archie A. Stone, pp 195-212.
3.

Instructional Materials:

1. OP-IV-TM-1, Computing Weekly Gross Income
2. OP-IV-INFO-2
3. OP-IV-TM-3, Responsibilities of a Farm Supply Store's Sales Clerk
4. OP-IV-TM-4, Opportunities in Agricultural Supplies and Services
5. OP-IV-INFO-5, Job titles in Agricultural Supplies and Services.

Interest Approach: Have each student prepare a written job description of the work they are now doing in a part-time job or a job they previously had. Have another student critique each student's report and ask questions about that job.

Learning Activities:

1. Have the students compute the weekly gross and overtime pay from problems given by the instructor. This might be one of the responsibilities of a small businessperson. This also would be helpful to double check your own pay check. TM-1 should be used.

2. Discuss the four basic types of business ownership and the differences of each type. Discuss some of the advantages and disadvantages of working for these different types of businesses. INFO-2 should be used.

3. Discuss those jobs available in lumber yards, hardware, farm equipment, petroleum, tires, batteries and accessories businesses in the school district service area. Some examples of these sales and service jobs are route salesperson, petroleum specialist, farm service center manager, salesperson, lumber yard foreman, public relations specialist, product fieldperson, plant maintenance person, implement parts person, and equipment company representative. Discuss some of the responsibilities of these occupations. Responsibilities of a farm supply store's sales clerk are given in TM-3.

4. Construct a chart that shows the jobs available, the training and experiences that are required for job entry, salary, fringe benefits and the physical requirements for jobs that are available in this industry.

Conclusion: Have the students conclude this unit by defining Agricultural Supplies and Services and its opportunities. Use TM-4, and INFO-5.

Evaluation: As a result of this lesson, students should be able to:

1. Identify different responsibilities an employee might have in these industries.

2. Identify the four basic types of business ownership and their differences.

3. Describe the opportunities in the farm equipment, hardware, lumber, petroleum and TBA sales and service industry in the community.

4. Compute the overtime pay and the gross income from a given problem.

COMPUTING WEEKLY GROSS INCOME

Number of hours worked equals fifty-two hours. Rate of pay equals $5.25.

Step 1: Base weekly pay equals 40 hours times rate of pay.
40 hours X $5.25 = $210.00

Step 2: Overtime pay equals number of overtime hours times 1.5 times the rate of pay.
12 hours X $5.25 X 1.5 = $94.50

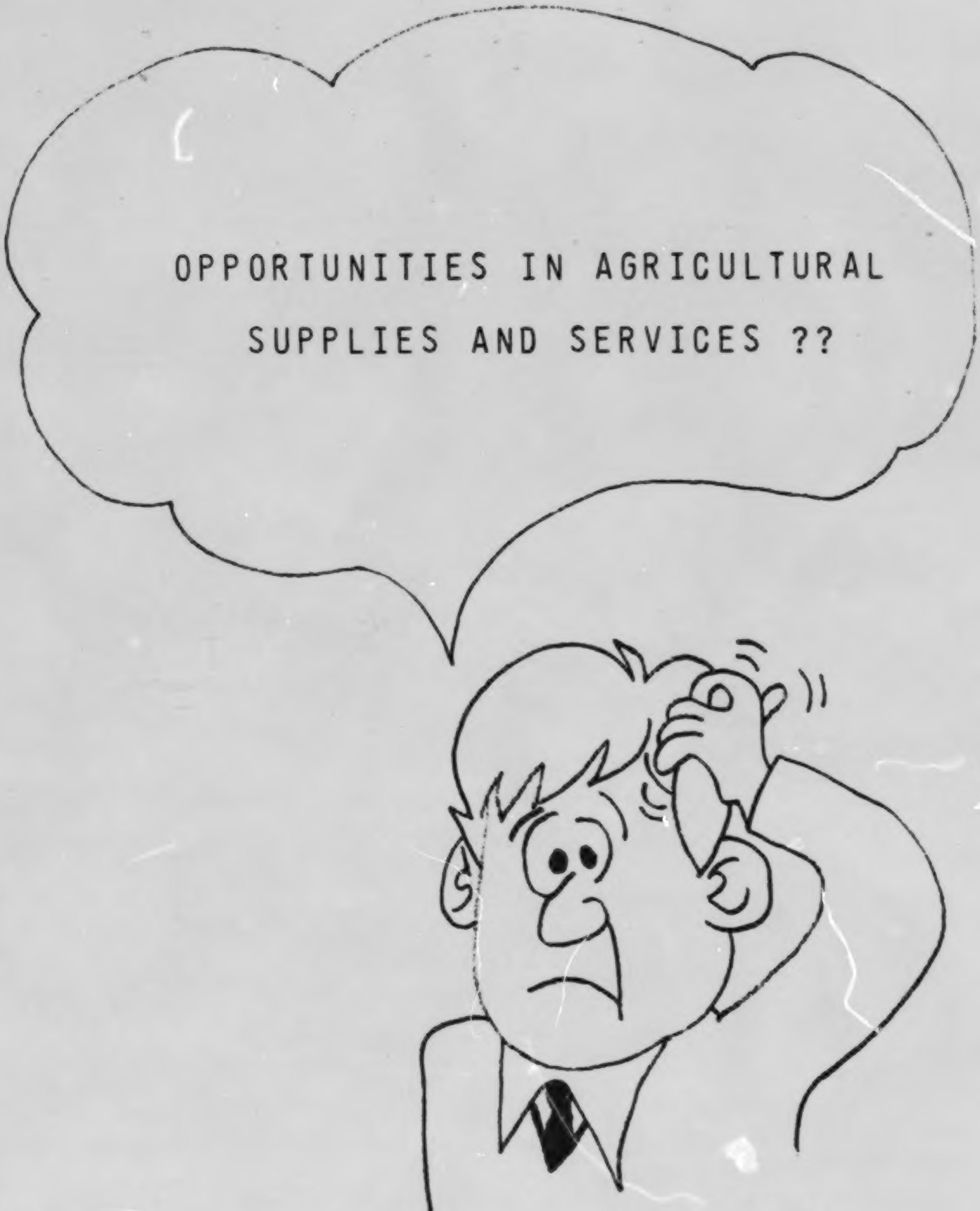
Step 3: Weekly gross income equals the base pay plus the overtime pay.
$210.00 + $94.50 = $304.50

Type	Individual Proprietorship	Partnership	Cooperative Type Corporation	General Business Type Corporation
How Set Up	By owner	By agreement among partners	By people needing goods and services	By investors
Controlled By	Owner	Partners	Members - One vote each	Owners of majority stock - one vote for each share
Disposition of Earnings	All to Owner	All to partners	Pay interest or dividends on shares; return patronage refunds to partrons & retain reserves. Non-stock Coops don't have shares	Pay dividends to stockholders and retain reserves in in the business
Taxed in the Business	Nothing	Nothing	All earnings	All earnings
Taxed to Recipients	All earnings	All earnings	Interest or dividends and patronage refunds where they constitute income	Dividends

RESPONSIBILITIES OF A FARM SUPPLY STORE'S SALES CLERK

1) Assembling supplies for customers to buy
2) Providing information on proper use of supplies sold

3) Advertising available supplies
4) Selling supplies
5) Packaging supplies for customers
6) Keeping records on inventory
7) Sorting, grading or pricing supplies not previously classified by the manufacturer or wholesaler
8) Transporting supplies to other businesses and/or customers
9) Loading and unloading supplies
10) Providing miscellaneous services, such as basic bookkeeping practices


OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES ??

TAKE A LOOK AT SOME OF THE OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES!

FEED

1. Feed Grain Buyer
2. Feed Grinder
3. Feed Mill Superintendent
4. Feed Equipment Operator
5. Feed Processing Supervisor
6. Feed Salesperson
7. Feed Sales Manager
8. Feed Warehouse Person
9.
10.

MACHINERY AND EQUIPMENT

1. Calibrator
2. Equipment Salesperson
3. Farm Equipment Dealer
4. Machinery Erector
5. Machinery Sales Manager
6. Machinery Service Manager
7. Machinery Supply Mechanic
8. Parts Person
9. Sales Engineer
10.
11.

GRAIN

1. Grain Elevator Worker
2. Grain Elevator Manager
3. Grain Grader
4. Grain Inspector
5. Grain Hauling Contractor
6. Grain Hauler
7. Grain Storage Construction
8. Grain Storage Salesperson
9.
10.

TAKE A LOOK AT SOME OF THE OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES!

ANIMAL HEALTH

1. Animal Health Supply Salesperson
2. Veterinarian's Assistant
3. Pet Center Sales Clerk
4. Animal Health Supply Manager
5. Animal Health Researcher
6.
7.

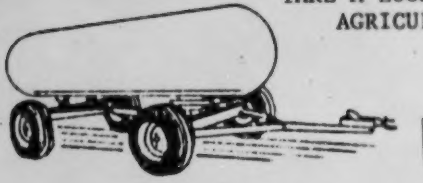
SEED

1. Germination Worker
2. Seed Analyst
3. Seed Cleaner
4. Seed Production
5. Seed Sales Manager
6. Seed Salesperson
7. Seed Supply Manager
8. Seed Warehouse Person
9.
10.

PETROLEUM

1. Petroleum Engineer
2. Petroleum Inspector
3. Petroleum Routeperson
4. Petroleum Sales Manager
5. Petroleum Salesperson
6. Petroleum Service Manager
7. Petroleum Service Mechanic
8. Petroleum Specialist
9. Petroleum Warehouseperson
10.
11.

TAKE A LOOK AT SOME OF THE OPPORTUNITIES IN AGRICULTURAL SUPPLIES AND SERVICES!



FERTILIZER

1. Batch Weigher
2. Fertilizer Applicator Operator
3. Fertilizer Field Representative
4. Fertilizer Mixer
5. Fertilizer Plant Manager
6. Fertilizer Sales Manager
7. Fertilizer Salesperson
8. Fertilizer Service Manager
9. Soil Sampler and Tester
10. Fertilizer Warehouseperson
11.
12.

AGRICULTURAL CHEMICALS

1. Chemical Applicator
2. Chemical Mixer
3. Chemical Supply Warehouse Person
4. Crop Sprayer
5. Aircraft Helper
6. Exterminator
7. Chemical Salesperson
8. Chemical Supply Manager
9.
10.

UNIT: HUMAN RELATIONS (HR)

Problem Areas Included:

HR-I. Why are human relations an important component of agricultural supplies and services?

HR-II. How can you know yourself?

HR-III. How can you set clear goals and make good decisions?

HR-IV. How do I improve job relations with others?

HR-V. How can I better use my communications skills?

HR-VI. What is leadership?

HR-VII. In what ways do I influence people?

HR-VIII. What should I know about social skills and proper manners?

References used in this unit:

1. Human Relations, Ashbacher, IAVIM, 1973.

2. The Applied Biological and Agribusiness Interest Inventory, Interstate Printers and Publishers, Inc., Jackson at Van Buren. Danville, Illinois 61832.

3. "Getting Along With Other Workers", Succeeding on Your First Job, Ohio State, 1977.

4. "Human Relations in Agricultural Business", Agricultural Business Supply and Service, Ohio Agricultural Education Curriculum Materials, 1976.

5. Materials from Bell Systems, Northwestern Bell Telephone Library, 620 9th Street, Des Moines, Iowa 50309, (800/532-1100).

6. Official FFA Manual.

7. FFA Contest Rules Handbook.

UNIT: HUMAN RELATIONS

PROBLEM I - Why are human relations an important component of Agricultural Supplies and Services?

Study Questions:

1. What are human relations skills?
2. How do human relations affect you on the job?
3. What human relations traits are necessary for successful employment?
4. How can I present my human relations skills to prospective employers?

References:

1. "Importance of Human Relations", Human Relations, IVAIM.

Instructional Materials:

1. Find-a-word Worksheet (ACT-1)

Interest Approach: Use the Find-a-word "Desirable Human Relations Traits" (ACT-1) to get students acquainted with some of these traits they should possess. These traits are desirable for good human relations. They should strive to develop these traits.

Learning Activities:

1. Have the class list, on the board, reasons why human relations are important. Discuss the importance of each of these. Include in the discussion: human relations related to the FFA, employment, and everyday living.
2. Define human relations for the class. (Emphasize the following concepts: getting along with others, desirable personality traits, employer-employee realtionships, expressing yourself, etc.)
3. Interview local agribusinesspersons and determine which human relations traits they consider important for job success. Have the class develop a list of key questions to ask the agribusinessmen during the interview. Make copies for the students to take to the interview.
4. Discuss the results of the interviews with the class. Prepare a handout that summarizes the interview results.
5. Discuss how to develop these traits. List activities, on the board, that by participating in them, human relations traits would be developed.

Conclusion: Divide the class into groups of 3-4 and have them brainstorm ways to present these human relations traits to prospective employers. Summarize this problem area using these ideas from the groups. Relate these ideas to the discussion throughout the problem area.

Evaluation: As a result of this lesson, students should be able to:

1. Define human relations.
2. List desirable human relations traits that are necessary for successful employment.
3. List ways that they can develop these traits.
4. Explain how to present these traits to prospective employers.

Optional Learning Activities:

1. Using the teacher as an example, have the class list the desirable and undesirable human relations traits which would contribute to job success or failure.
2. Have students give examples of employees being fired because of a lack of these traits.
3. Have students bring in newspaper clippings that give examples of employment problems caused by a lack of human relations traits.

DESIRABLE HUMAN RELATIONS TRAITS

Circle the desirable personality traits that you find.

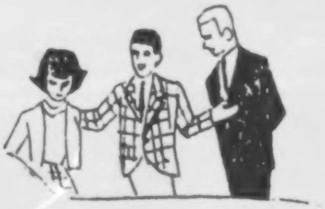
H	O	N	N	I	H	O	N	E	S	T	B	V	K	I	N	D	D	C
E	E	N	E	R	G	E	T	I	C	A	A	S	I	N	G	G	T	O
T	O	E	L	M	A	P	P	R	E	C	I	A	T	I	V	E	M	O
O	T	A	R	N	P	Q	K	P	A	T	I	E	N	T	O	U	R	P
L	A	R	O	N	T	E	F	F	E	F	F	I	C	I	E	N	T	E
E	N	T	A	C	T	E	N	T	H	U	S	I	A	S	T	I	C	R
R	E	A	L	I	S	T	I	C	P	L	O	Y	A	L	O	Y	L	A
A	C	C	U	R	A	T	E	A	C	C	R	A	E	A	L	E	R	T
N	R	E	L	E	S	T	I	A	C	P	E	N	D	A	B	S	L	I
T	E	A	C	A	X	D	E	P	E	N	D	A	B	L	E	O	P	V
X	A	W	E	L	C	I	T	R	E	S	P	O	N	S	I	B	L	E
Y	W	A	D	I	R	E	S	P	I	N	S	I	B	L	A	E	S	R
Z	O	P	R	S	A	G	A	G	R	E	E	A	B	L	E	S	S	E
P	R	M	A	T	U	R	E	P	Q	C	A	R	E	F	U	L	A	A
Q	R	S	H	I	P	C	O	N	S	C	I	E	N	T	I	O	U	S
R	R	S	A	C	O	N	F	I	D	E	N	C	E	A	N	C	E	R

WORDS TO USE

The following are a list of traits that you should possess for good human relations in Agricultural Supplies and Services.

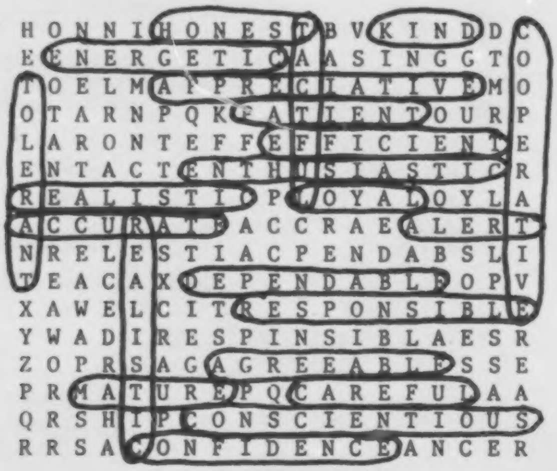
HONEST
CAREFUL
DEPENDABLE
COOPERATIVE
ACCURATE
CONSCIENTIOUS
RESPONSIBLE
MATURE
ALERT
CONFIDENCE
ENTHUSIASTIC

EFFICIENT
LOYAL
PATIENT
ENERGETIC
KIND
AGREEABLE
APPRECIATIVE
TACTFUL
REALISTIC
TOLERANT



DESIRABLE HUMAN RELATIONS TRAITS

Circle the desirable personality traits that you find.



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H O N N I H O N E S T B V K I N D D C
E E N E R G E T I C A A S I N G G T O
T O E L M A P P R E C I A T I V E M O
O T A R N P Q K P A T I E N T O U R P
L A R O N T E F F E F F I C I E N T E
E N T A C T E N T H U S I A S T I C R
R E A L I S T I C P L O Y A L O Y L A
A C C U R A T E A C C R A E A L E R T
N R E L E S T I A C P E N D A B S L I
T E A C A X D E P E N D A B L E O P V
X A W E L C I T R E S P O N S I B L E
Y W A D I R E S P I N S I B L A E S R
Z O P R S A G A G R E E A B L E S S E
P R M A T U R E P Q C A R E F U L A A
Q R S H I P C O N S C I E N T I O U S
R R S A C O N F I D E N C E A N C E R
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WORDS TO USE

The following are a list of traits that you should possess for good human relations in Agricultural Supplies and Services.

- HONEST
- CAREFUL
- DEPENDABLE
- COOPERATIVE
- ACCURATE
- CONSCIENTIOUS
- RESPONSIBLE
- MATURE
- ALERT
- CONFIDENCE
- ENTHUSIASTIC
- EFFICIENT
- LOYAL
- PATIENT
- ENERGETIC
- KIND
- AGREEABLE
- APPRECIATIVE
- TACTFUL
- REALISTIC
- TOLERANT

UNIT: HUMAN RELATIONS

PROBLEM II - How can you know yourself?

Study Questions:

1. What are your desirable and undesirable personality traits?
2. How can I better understand myself?
3. Why is good self-confidence important?
4. How can I develop my self-confidence?
5. How can keeping abreast of new technological advancements help my self-confidence?
6. Why is constructive criticism important?

References:

1. The Applied Biological and Agribusiness Interest Inventory, The Interstate Printers and Publishers, Inc., Jackson at Van Buren. Danville, IL 61832.
2. "Personality", Human Relations, Ashbacher, IAVIM.
3. "Know Yourself", Human Relations, Ashbacher, IAVIM.
4. "Self-confidence", Human Relations, Ashbacher, IAVIM.

Interest Approach: Administer The Applied Biological and Agribusiness Interest Inventory. Ask the high school guidance counselor to help score the inventory.

Learning Activities:

1. Use the list of human relations (or personality) traits from (ACT-1) in problem area one.

   Have the students list those traits they now possess.

   Have them list those traits that they do not possess now.

   Which list is longer?

   Discuss ways to acquire these traits.

2. Have the high school guidance counselor present the results of The Applied Biological and Agribusiness Interest Inventory. Discuss these results with the class.

3. Have students relate situations in athletics where an increase or lack of self-confidence would have won or lost the game. List, on the board, what could have been done to change the outcome, whether winning or losing.

4. Discuss how keeping abreast of new technological advancements will help improve self-confidence on the job (e.g., product knowledge).

5. List sources of information for new technological advancements.

Conclusion: Discuss how constructive criticism can be beneficial towards improving one's self-confidence. Also, discuss how constructive criticism can help you acquire desirable human realtions traits.

Evaluation: As a result of this lesson, students should be able to:

1. List their desirable and undesirable personality traits.

2. List ways to better understand themselves.

3. Describe ways to develop self-confidence, tell why it is important, and give guidelines to follow.

4. Give examples of how keeping abreast of new technological advancements can improve your self-confidence.

5. List ways to use constructive criticism.

Optional Learning Activities:

1. Have students discuss each other's personality traits.

2. Have students write out the things or values they possess.

3. Have students describe individuals they know that lack self-confidence.

4. Use the personality inventory on pages 6 and 7 of Human Relations.

5. Discuss the Five Essential Job Success Personality Traits on pages 7 and 8 of Human Relations.

UNIT: HUMAN RELATIONS

PROBLEM III - How can you set clear goals and make good decisions?

Study Questions:

1. How can I formulate short and long term goals?
2. What are the chances of reaching these goals?
3. How can I make decisions through problem solving?
4. How can I make decisions by listing the advantages and disadvantages of a decision and using the scientific method in decision making?
5. How can I recognize those factors which affect a decision after it has been made?

References:

1. "Setting Clear Goals", Human Relations, Ashbacher, IAVIM.
2. "Making Decisions", Human Relations, Ashbacher, IAVIM.

Instructional Materials:

1. Tally Sheets - "Win as Much as You Can"
2. Transparency Master - "Win as Much as You Can"

Interest Approach: "Win as Much as You Can"

Follow the directions included (ACT-1).

Duplicate copies of the Tally Sheet (ACT-1).

Prepare transparency (TM-2).

Learning Activities:

1. Have students write down two things they want to accomplish in the next month, the next year, and after graduating from high school.
2. Discuss with the students the possibility of reaching these goals.

3. Use small group discussion, 3-5 students per group, to decide if all goals should be easy to attain. Summarize the group discussion with the entire class.

4. If you use FFA Achieverent Awards, this would be a good place to show examples of how these help to make decisions and establish goals through the vocational agriculture program.

5. Have students consider a problem. (Example: Should they purchase a new car.) Have them write down the advantages and the disadvantages of this purchase. Then have them decide whether to purchase the car. Students should justify their decision to the class.

Conclusion: Have students write down 5 goals they hope to accomplish in the next year. Relate these goals to those they identified earlier.

Evaluation: As a result of this lesson, students will be able to:

1. Set goals that they want to reach in the next month, next year, and after graduating from high school.

2. Discuss the possibility of reaching these goals.

3. Make decisions using problem solving.

4. Make decisions after considering the advantages and the disadvantages.

5. Recognize those factors that affect a decision after it has been made.

Optional Learning Activities:

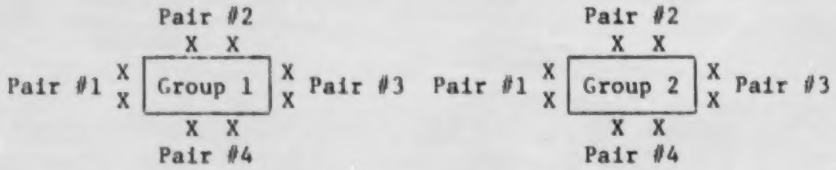
1. Discuss using management by objectives in order to help make decisions.

2. Discuss managerial grids with the class.

"Win as Much as You Can"

How to Play:

1. This student activity works best if the class is divided into two groups as shown below with eight students, four pairs, in each group. (One group could be used if there are not enough students, or more groups could be used if there are more students.)



2. The teacher should explain that the group is going to play "Win as Much as You Can".
3. Divide the class as explained in Step 1. They should then be instructed not to communicate with the other players in any manner--verbally or nonverbally--except when they are told to do so by the teacher.
4. "Win as Much as You Can" tally sheets should be distributed, one to each pair. Explain that there will be eight rounds of choice, each pair will either choose "X" or "Y".
5. The teacher is the timer and must control the flow of the game. Encourage group interaction on Rounds 4, 6 and 8.
6. Round 1 - Each team has two minutes to choose a letter. The pair should discuss between themselves the choice they will make. After two minutes, the teacher should tell each pair to mark their choice on the Tally Sheet. Then check with the other pairs in your group and mark your score on the Tally Sheet.
7. Round 2 - Same as Round 1, except each pair only has one minute.
8. Round 3 - Same as Round 2.
9. Round 4 - All four pairs discuss for three minutes.
10. Round 5 - Same as Round 2.
11. Round 6 - Same as Round 4.
12. Round 7 - Same as Round 2.
13. Round 8 - Same as Round 4.
14. Pairs should total their score. Then on chalk board compute the total of the four pairs in each group. Compare the scores of each group.
15. Group discussion: use "Points to be Made".

WIN AS MUCH AS YOU CAN TALLY SHEET

Directions: For 8 successive rounds you and your partner(s) will choose either an "X" or a "Y." The "pay-off" for each round is dependent upon the pattern of choices made in your group.

4 X's:	Lose $100 each
3 X's: 1 Y :	Win $100 each Lose $300
2 X's: 2 Y's:	Win $200 each Lose $200 each
1 X : 3 Y's:	Win $300 Lose $100 each
4 Y's:	Win $100 each

Strategy: You are to confer with your partner(s) on each round and make a joint decision. Before rounds 4, 6, and 8 you may confer with the other people in your group.

	STRATEGY						
ROUND	TIME ALLOWED	CONFER WITH	CHOICE	$WON	$LOST	$BALANCE	
1	2 mins.	partner					
2	1 min.	partner					
3	1 min.	partner					
4	3 mins. +1 min.	group partner					Bonus round: pay-off is multiplied by 3
5	1 min.	partner					
6	3 mins. +1 min.	group partner					Bonus round: pay-off is multiplied by 5
7	1 min.	partner					
8	3 mins. +1 min.	group partner					Bonus round: pay-off is multiplied by 10

"WIN AS MUCH AS YOU CAN"

Points to be made

1. Working together would have made more money.
2. Trusting each other equals more money.
3. If we played again - we could win more.
4. By playing the game - we learned how to play it.
5. Learned by doing!

UNIT: HUMAN RELATIONS

PROBLEM IV: How do I improve job relations with others?

Study Questions:

1. What personality qualities make a good employer?
2. What does an employer expect from an employee?
3. How can I build good co-worker relationships?
4. How can I gain cooperation from others?
5. What behaviors are expected of me while on the job?
6. How do I work with customers?
7. How can I recognize those situations in which I should not argue?

References:

1. "Getting Along With Other Workers" Succeeding on Your First Job, Ohio State, 1977.
2. "Human Relations in Agricultural Business" Agricultural Business Supply and Service, Ohio Agricultural Education Curriculum Materials, 1976.

Instructional Materials:

1. What to Do on the Job (TM-1)
2. What not to Do on the Job (TM-2)
3. Things to Do on the Job (ACT-3)
4. Working with Others (ACT-4)

Interest Approach: Have the students list three qualities of their favorite teacher that they feel are good. List three qualities that are not as good. Relate these to qualities that would affect employee-employer relationships. Discuss this with the class.

Learner Activities:

1. Have students develop a survey, in class, to use to survey local agribusiness managers to find what personality traits they look for when hiring new employees. Have the students survey local agribusiness managers.

2. Discuss the results of the survey with the class.

3. Discuss the case studies of business human relations problems found in: "Getting Along with Other Workers", from Ohio State Curriculum Materials. This booklet contains some excellent case studies.

4. Have students brainstorm about those traits that are desirable for employees to possess. Former cooperative students could serve as a panel to discuss those traits they felt were important to them as they worked on the job.

5. Have a resource person (possible a group of 3-4 local agribusiness managers serve as a panel) discuss some of the traits they feel that the students should possess.

6. Interview employees and see what characteristics their supervisors and employers have that make them enjoyable to work for. (This could be used in conjunction with Learner Activity #4).

7. Discuss what should and what should not be done while on the job. Show transparencies What to Do on the Job (TM-1) and What not to Do on the Job (TM-2).

Conclusion: To conclude this problem area, discuss some of the same case studies discussed earlier. How have the suggestions of the students changed?

Evaluation: As a result of this lesson, students should be able to:

1. List personal qualities that make an employer enjoyable to work for.
2. List personal qualities employers expect from employees.
3. List ways to develop productive co-worker relationships.
4. Suggest ways to gain cooperation from others.
5. List behaviors that are expected of employees while on the job.

6. List ways that you should treat customers.
7. Describe a situation where arguing will cause problems. (Refer to case studies discussed.)

Optional Learning Activities:

1. Teacher could talk with local agribusiness managers while recording the conversation on tape. Then play this back to the class and discuss it.
2. Use a classroom telephone, talk with local agribusiness manager during class.
3. Things to Do on the Job (ACT-3)
4. Working with Others (ACT-4)

What to do on the Job

1. BE ON TIME TO WORK.
2. SMILE.
3. ASK QUESTIONS.
4. DO WHAT YOU SAY YOU WILL.
5. MAKE SUGGESTIONS.
6. TALK WITH EMPLOYER ABOUT PROBLEMS, NOT SOMEONE ELSE.
7. USE "HELLO", "THANK YOU", "YES SIR", - NOT SLANG.
8. KEEP YOUR EYES AND EARS OPEN.
9. BE CHEERFUL.
10. TALK IN TERMS OF OTHERS.
11. BE ENERGETIC.
12. BE NEAT.
13. SHOW AN INTEREST
14. IF HURT, TELL EMPLOYER AT ONCE.

SOURCE: HUMAN RELATIONS IN AGRICULTURAL BUSINESS, OHIO AGRICULTURAL EDUCATION CURRICULUM MATERIALS SERVICE, 1976.

What not to do on the Job

1. SMOKE WHILE WAITING ON CUSTOMERS.
2. SMOKE IN WAREHOUSE.
3. EAT ON THE JOB.
4. HANG AROUND THE CASH REGISTER.
5. ARGUE - GUESS - GOSSIP - COMPLAIN.
6. SAY, "I DO NOT KNOW," RATHER, "I WILL FIND OUT."
7. TALK ON PRICE ALONE.
8. TALK DOWN TO PEOPLE.
9. BE AN EXPERT.
10. MAKE PERSONAL PHONE CALLS - OR RECEIVE THEM.
11. HAVE A BUDDY COME BY FOR A VISIT.
12. GIVE CREDIT - REFER TO EMPLOYER.

SOURCE: HUMAN RELATIONS IN AGRICULTURAL BUSINESS, OHIO AGRICULTURAL EDUCATION CURRICULUM MATERIALS SERVICE, 1976.

THINGS TO DO ON THE JOB

Fill in the missing words:

1. Always be on ____________________.
2. Demonstrate a good ______________________ towards your work, for this is the most important factor in job success.
3. Listen to all instructions and _________________ them carefully.
4. Ask ______________________ whenever necessary if you do not understand directions.
5. Be a good ____________________ since understanding directions is extremely important.
6. Give your employer a full day's _____________________ and stay busy on the job.
7. Be patient and _____________________ with fellow workers.
8. Practice personal _____________________ and always be careful of body odor.
9. Do not overstay your lunch hour or coffee ____________________.
10. Remember to take the _____________________ approach in all your business dealings.
11. Learn the rules and ____________________ of your company, for by so doing you can avoid many pitfalls.
12. Seldom ____________________ others for you may be working with them for a long time.
13. Tact and __________________ are the watchwords for good business practice.
14. Watch your fellow employees' ____________________ of doing things and do not hesitate to ask them for help when needed.
15. When talking with another person or when receiving instructions

    from your boss, look him ___________________ in the eye.
16. Accept the ____________________ for your own mistakes.
17. Dress appropriately and present a(n) _____________________ appearance to your co-workers.

Choose from the following words to fill in the blanks above:

courtesy
regulations
suggestions
understanding
listener
time
attitude
boss
questions
policies
attractive
straight
critical
criticize
responsibility
follow
cleanliness
positive
challenge
report
method
smile
break
work

Source: An Activity-Based Curriculum for Occupational Orientation, Jordan, Mary B.; Vocgeli, Joseph E,, Alton, IL, 1972.

WORKING WITH OTHERS

Complete the following statements by filling in the proper terms:

1. Engaging in ___________________ distracts other workers, may cause an accident, and could lead to dismissal.

2. _______________________ can mean taking too much time for a coffee break as well as using company postage to mail personal letters.

3. A person can display ___________________ in the way he dresses as well as in the way he does his job.

4. A person who tries to get out of work and does only what he has to displays _______________________.

5. A ______________________________ can mean that a person may never be promoted because he fails to make decisions for himself and take advantage of situations as they develop.

6. It is always wise to inform an employer when an employee cannot report to work. Too many ________________ can cause a person to lose his job.

7. Excessive ______________________ sometimes is rewarded by loss of a job or deductions in pay.

8. An ________________________ employee makes life extremely difficult for his employer, his fellow workers, and eventually himself.

9. ____________________________ is a characteristic most employers must find unacceptable. Being able to rely on their employees must be a part of the employer-employee relationship.

10. ____________________________ and lack of attention to detail and instructions can cause others to form a poor opinion of the employee.

Choose from the following words:

carelessness
self-satisfaction
horseplay
irresponsibility
unexcused absences
lack of initiative
tardiness
uncooperative
laziness
dishonesty
sloppiness

Source: *An Activity-Based Curriculum for Occupational Orientation*, Jordan, Mary B. Vocgeli, Joseph E., Alton, IL, 1972.

KEY: Things to Do on the Job

1. time
2. attitude
3. follow
4. questions
5. listener
6. work
7. understanding
8. cleanliness
9. break
10. positive
11. policies
12. criticize
13. courtesy
14. method
15. straight
16. responsibility
17. attractive

KEY: Working with Others

1. horseplay
2. dishonesty
3. sloppiness
4. laziness
5. lack of initiative
6. unexcused absences
7. tardiness
8. uncooperative
9. dishonesty
10. irresponsibility

UNIT: HUMAN RELATIONS

PROBLEM V - How can I better use my communications skills?

Study Questions:

1. How can I improve my communications skills?
2. How should I use the telephone?
3. What should I do when talking on the telephone?
4. How can I write proper job instructions, messages, and business letters?
5. How can I follow oral and written job instructions?
6. How can I give a good speech?

References:

1. "Human Relations in Agricultural Business," Agricultural Business Supply and Service, Ohio Ag Ed Curriculum Materials Service, Ohio State University, 1976.
2. Materials from Bell Systems.
3. Northwestern Bell Film Library, 620 9th St., Des Moines, IA 50309, (800) 532-1100.

Instructional Materials:

1. When Your Telephone Rings ... (TM-1)
2. When Your Telephone Rings ... (INFO-2)
3. Six Signposts to Success (TM-3)
4. Six Signposts to Success (INFO-4)
5. Taking a Telephone Message (TM-5)

Interest Approach: Have the students role play "Telephone Situation Problems". There are several of these on pages 33-36 of Human Relations in Agricultural Business.

This will help the students see how people respond in business settings using the telephone.

Discuss what they heard. Have the students offer suggestions that would have made the conversation more effective.

Learning Activities:

1. Have the students list, on the board, different types of communications used in the business world today. (Telephone, letters, job instructions-written or oral, speeches, etc.) Discuss each type.

2. Discuss ways that these communication skills (talking on the telephone, writing letters, etc.) can be improved. Practice -- the best method.

3. Discuss proper telephone use. (Several films are available from Bell Systems.)
   Using When Your Telephone Rings ... (TM-1 & INFO-2) discuss these suggestions for effective telephone use.
   Using Six Signposts to Success (TM-3 & INFO-4) discuss with the class how to implement these.

4. Using Taking a Telephone Message (TM-5) discuss with the students why each of these steps are important.
   Have the students practice taking messages as you give information as though you were talking over the telephone.

5. Discuss the importance of job instructions.
   Often, the employer will leave written job instructions for jobs that are to be completed while he or she is away. You will need to be able to follow the message.
   Discuss both oral and written job instructions.

6. Writing letters for business purposes.
   The students probably will not be writing letters as entry level employees. Therefore, this might not be included.

Conclusion: Have the students prepare and give a 2-3 minute speech (or presentation) on one of the methods of business communications discussed in class.

Evaluation: As a result of this lesson, students should be able to:

1. List ways they can improve their communications skills.

2. List ways to properly use the telephone.

3. List suggestions for improving efficiency of using the telephone.

4. Follow oral and written job instructions.

5. Write job instructions, messages and letters.

6. Give a prepared speech.

Optional Learning Activities:

1. Write a letter to a friend, relative, or parent, praising them for something they have done for you.

2. Possibly have a joint class with the speech class. Speech teacher can help evaluate speeches.

3. A speech could be used in conjunction with the FFA public and extemporaneous speaking contests.

4. Possibly videotape a presentation, this would allow students to see if they have any distracting mannerisms.

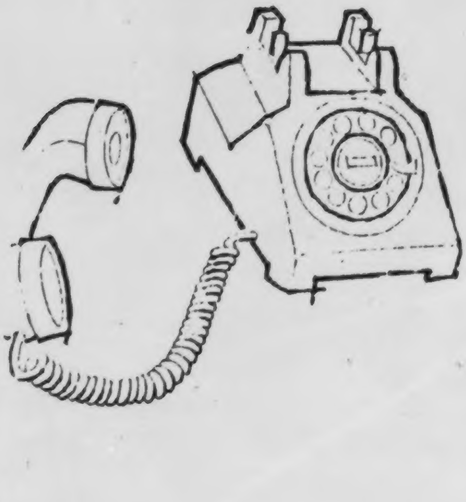
When Your Telephone Rings . . .

Answer Promptly

Identify Yourself

Be Friendly

Be Considerate



WHEN YOUR TELEPHONE RINGS . . .

Answer Promptly - Quick service helps build a reputation of efficiency for you and your company, so try to answer on the first ring if possible.

Identify Yourself - It gets the conversation off to a good start and helps personalize the call.

Be Friendly - Show that you're interested. Be a good listener so that the person will not have to repeat what he says.

Be Considerate - Don't try to carry on two conversations at once. Callers shouldn't be made to feel they're competing with people in your office for your attention.

Source: "Your Telephone Personality", Bell Systems.

Six Signposts to Success

1. **Be Alert**
2. **Be Natural**
3. **Be Expressive**
4. **Be Distinct**
5. **Be Pleasant**
6. **Be Courteous**

SIX SIGNPOSTS TO SUCCESS

1. Be Alert - A cheerful, wide-awake greeting sets the tone of any conversation and shows you are ready to help.

2. Be Natural - Use simple language. Avoid slang and technical terms.

3. Be Expressive - Speak at a moderate rate and volume, but vary the tone of your voice to add vitality and emphasis to what you say.

4. Be Distinct - Pronounce your words clearly and carefully. Always speak directly into telephone transmitter.

5. Be Pleasant - Show that you are interested in being helpful. Personalize your conversation by using the person's name.

6. Be Courteous - Good telephone habits are nothing more than good manners.

Source: "Put a Smile in Your Voice", Bell Systems.

Taking a Telephone Message

Include:

1. The caller's name
2. The caller's phone number
3. The caller's firm or department
4. Date and time of the message
5. The message
6. Your name

UNIT: HUMAN RELATIONS

PROBLEM VI - What is leadership?

Study Questions:

1. Is leadership important for working on the job?
2. Which leadership skills are important?
3. Where can I develop these leadership skills?
4. How can I better use my leadership skills in my work?

References:

1. Official FFA Manual
2. FFA Contest Rules Handbook

Instructional Materials:

1. FFA Creed - Third Paragraph (TM-1)
2. Videotape unit

Interest Approach: Use the transparency of the FFA Creed - Third Paragraph (TM-1). Have the students explain what this means to them.

Questions to ask:

1. Will this leadership from ourselves come from everyone, or just from a few people in agriculture?
2. Is this leadership important on the job?
3. What leadership skills can you use on the job?

Learning Activities:

1. Discuss ways that leadership skills help you on the job. (Examples: being in charge of a work group, presenting your product to the customer, helping close a sale, etc.)
2. Have students list those leadership skills, on the board, that are important for job success. Discuss how these leadership skills increase the probability for job success.

3. Discuss ways to develop these leadership skills and where they can be developed. (FFA activities and contests are good ways to develop leadership skills.)
   Following the guidelines in the FFA Contest Rules Handbook, have the students develop either a Salesmanship Demonstration or a Job Interview.

4. Divide the students into groups of 3-4. Have them produce a commercial using the videotape machine. Encourage them to include the leadership skills that have been discussed.

Conclusion: Have the students identify two people, (do not tell anyone else who those people are) one who they consider to be an effective leader and one who is less effective. Have the students list traits of each one that leads to their degree of effectiveness. The students should be able to defend their reasons.

Evaluation: As a result of this lesson, students should be able to:

1. Explain why leadership is important for working on the job.
2. List those leadership skills that are important.
3. Explain where these leadership skills can be developed.
4. List ways to use these leadership skills on the job.

Optional Learning Activities:

1. Other FFA activities and contests such as: public speaking, conduct of meetings, leadership workshops, etc.
2. Have students list leadership skills that are necessary for the Secretary of Agriculture.
3. Have the students try to sell a product to the class. Have the class members list the leadership skills exhibited during the presentation.

FFA CREED - THIRD PARAGRAPH

I BELIEVE IN LEADERSHIP FROM OURSELVES AND RESPECT FROM OTHERS. I BELIEVE IN MY OWN ABILITY TO WORK EFFICIENTLY AND THINK CLEARLY, WITH SUCH KNOWLEDGE AND SKILL AS I CAN SECURE, AND IN THE ABILITY OF PROGRESSIVE AGRICULTURISTS TO SERVE OUR OWN AND THE PUBLIC INTEREST IN PRODUCING AND MARKETING THE PRODUCT OF OUR TOIL.

UNIT: HUMAN RELATIONS

PROBLEM VII - In what ways do I influence people?

Study Questions:

1. What sales techniques are used to close a sale?
2. In what ways do others influence me?
3. How can I gain cooperation from others?

References:

1. "Influencing People", Human Relations, Ashbacher, IAVIM.

Instructional Materials:

1. How People are Influenced (TM-1)

Interest Approach: Before starting, show How People are Influenced, (TM-1) this should help stimulate ideas.

Have the students discuss television commercials they have seen. Have the students list key terms and phrases they have heard that might influence them. Also list salesmanship techniques that were used to help make a sale.

Discuss how this relates to an agribusiness and ask the following questions:

1. Can you think of times when influence has been used negatively?
2. Can influence have the same connotation as taking advantage of someone?
3. What are some examples of people being influenced to do something that was wrong?

Learning Activities:

1. Have the students tell what cooperation means to them. (Emphasize these ideas: helping others, sharing the work load, working toward a common goal, pooling resources, etc.)

Conclusion: Have the students give examples of how influencing people and gaining cooperation from others would increase the efficiency of an agribusiness.

Evaluation: As a result of this lesson, students should be able to:

1. List sales techniques that are used to close a sale.
2. List ways that others influence you.
3. Explain how to gain cooperation from others.

Optional Learning Activities:

1. Write a letter to a friend, parent or relative praising them for something they have done for you.

HOW PEOPLE ARE INFLUENCED

1. ***Selling***
2. ***Telling***
3. ***Asking***

Can you think of others?

UNIT: HUMAN RELATIONS

PROBLEM VIII - What should I know about social skills and proper manners?

Study Questions:

1. Why are proper social skills important?
2. How should I shake hands?
3. How do I make introductions?
4. What should I know about table manners?
5. Why should I be well groomed?

References:

1. "Handshakes", Human Relations, Ashbacher, IAVIM.

Instructional Materials:

1. Introductions (TM-1)

Interest Approach: Have an exchange class with the Home Economics Department.

The Home Economics students should present a 10-minute presentation on proper use of napkins, knives, forks, spoons, etc.

A light lunch could then be served.

The vocational agriculture students should then tell about the source of the food and about the amount of the actual store price that the farmer receives.

Learning Activities:

1. Using groups of 3-4 students, brainstorm situations where proper social skills are important for employees while on the job. (Emphasize being polite to customers and salesmen, meeting and greeting people, introducing people, company appreciation dinners, etc.)
2. Have the students shake hands with all of the other class members. Discuss the different handshakes the students received. (Include: hard, firm, limp, others.)

3. Discuss the key steps for making introductions using Introductions (TM-1). After discussing these steps, have the students role play making introductions. Discuss when this skill will be used in the work setting.

Conclusion: Have the students list reasons for developing proper social skills. Discuss the students' lists. (Emphasize making a good impression, gaining the respect of others, representing your company - not just yourself, others.)

Evaluation: As a result of this lesson, students should be able to:

1. Tell why proper social skills are important.
2. Shake hands properly.
3. Make proper introductions.
4. Tell why it is important to have good table manners.
5. Explain why it is important to be well groomed.

Optional Learning Activities:

1. Students write up situations on slips of paper indicating examples of poor table manners. They then draw from these slips and role play how they would react or handle the situation.
2. The advisor can set good examples for proper social skills and good table manners while with a group of students at FFA conventions, on field trips, senior trips, etc.

INTRODUCTIONS

KEY STEPS:

1. Generally, introduce the older person first.
2. Be sincere.
3. Be concise - "John Smith, meet Jack Jones."
4. If possible, give a brief item of interest to help start conversation.
5. Help avoid confusion.

UNIT: SALESMANSHIP (SA)

Problem Areas Included:

SA-I. What is the role of salesmanship in the American economy?

SA-II. To be a successful salesperson, which attributes should I possess?

SA-III. As a salesperson, how would I identify new and keep existing customers?

SA-IV. To be an effective salesperson, what knowledge of people should I possess?

SA-V. As a salesperson of agricultural products, of what significance will the telephone be to me? (see HR-V, pp. 47 - 54)

SA-VI. What store skills will I need to become an employee in an agricultural supply business?

SA-VII. What steps should I follow when planning a sales strategy?

References used in this unit:

1. The University of Illinois. 1971. Education For Agribusiness: A Guide to Secondary School Course Planning and Teaching. Department of Vocational and Technical Education, Urbana, Illinois.

2. Haas, Kenneth and Perry Enos. 1968. Sales and Horizons, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

3. Iowa State University, Salesmanship in Agricultural Occupations, Department of Agricultural Education, Ames, Iowa 50011.

4. Land O Lakes Agriculture Service. Vision Agricultural Sales. Land O Lakes, Vol. 1, No. 3.

5. The University of Arizona. Specialize Curriculum in Agriculture Sales and Service for Arizona. Department of Agriculture Education, Tucson, Arizona.

6. The University of Kentucky. Student Study Guide on Store Skills. Department of Vocational Education, Lexington, Kentucky.

UNIT: SALES

PROBLEM I - What is the role of sales in the American economy?

Study Questions:

1. Explain the role of selling in the American economy.
2. What contributions do salespersons make to business?
3. How are goods and services transferred from one person to the next?

References:

1.
2.
3.

Instructional Materials:

1. IVLAM Publication "Salesmanship"
2. Selling a Challenging Career (INFO-1)
3. Salesmanship seven transparency masters (TM-2 through TM-7)

Interest Approach: Have students name five items which they or their parents purchased from a salesperson the previous week. Next have the students try to name five items in their household which weren't purchased from some type of salesperson.

Learning Activities:

1. Discuss the relationship between the salesperson, consumer, and goods and services. Point out how the salesperson is the link between the consumer and agricultural goods and services (use INFO-1, TM-7, TM-1).
2. Have students explain why the number of salespersons have been increasing as we make technological advances (use Reference 1, Nothing Happens Until Something is Sold, B1-B7 and INFO-1).
3. Explain the role of salesmanship in a democratic society.
4. Define the following types of sales positions (use TM-1—TM-6), retail, wholesale, specialty and service. List the advantages and disadvantages of each.

5. List ten opportunities in selling.

6. Give an example of an introvert and extrovert (use Ref. 1, Nothing Happens until Something is Sold, B8-B21).

Conclusion: Explain why our free enterprise market could not function without salespeople.

Evaluation Criteria: As a result of the instruction, the student should possess the following abilities:

1. Define sales.
2. Identify and compare the four types of sales positions.
3. Explain the role of sales in the American economy?
4. Define and compare introverts and extroverts.

Optional Learning Activities:

1. Explain how democracy promotes the need for sales.

2. Students give examples of good and poor sales methods they have observed.

3. Estimate the percentage of all workers in the United States who owe their employment, at least in part, to contributions of salespersons.

4. Compare famous salespersons with famous statespersons and determine their contributions to the growth of the United States.

5. Name products purchased during the past week from sources other than vending machines.

Selling a Challenging Career

Selling, what is it?

Salespersons are an important part of the American economy, In fact, so far as making a profit is concerned, nothing happens until a sale is made.

What is selling? One widely excepted definition is that "salesmanship is the ability to interpret product and service features in terms of benefits and advantages to the buyer to persuade and motivate him or her to buy the right and quality of product or service." In short, selling is persuasion applied to the sale of merchandise and services.

The importance of selling

Selling is among the most important occupations in the United States in terms of the number employed and its economic importance.

Selling takes place all around us (e.g., a job applicant is trying to sell his personal services, the instructor is selling his/her course, the television station is able to operate because of the sales it promotes). The salesperson is our hedge against a depression. Salespeople are necessary to sell our surplus and keep the wheels of industry turning.

Salespeople are classified according to the customers they supply and the services they offer.

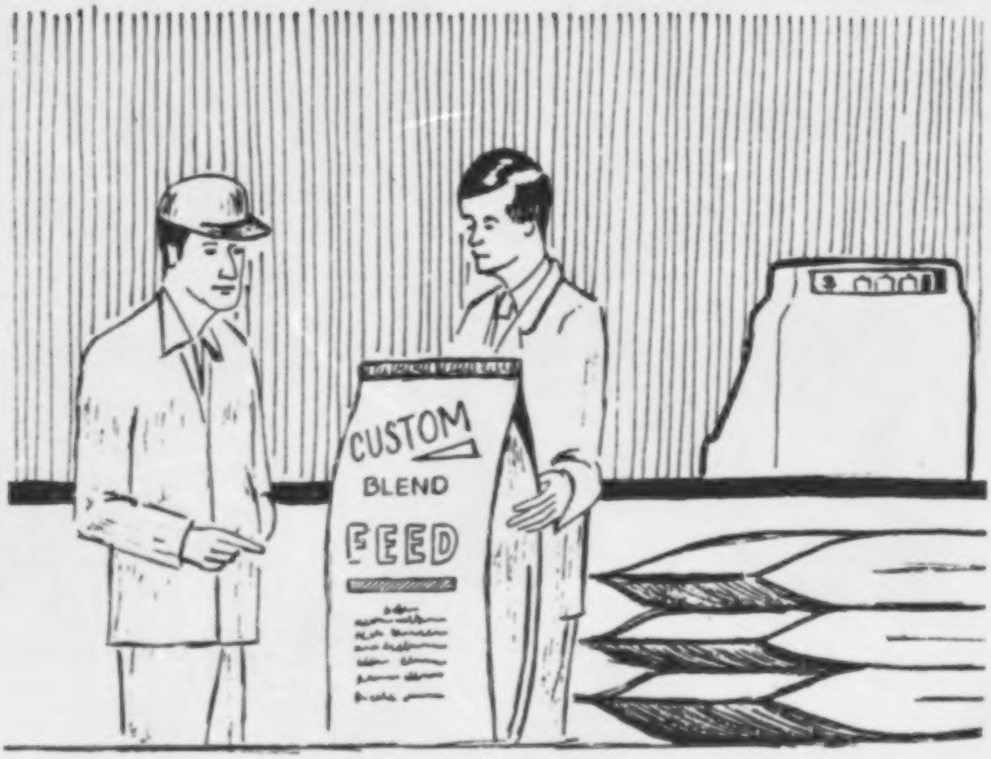
There are four basic types of salespeople.

Retail

Wholesale

Specialty

Service



Characteristics of retail selling

The buyer comes to the salesperson.

Almost everything people consume is sold through retail stores.

The retail salespeople are assured a weekly salary.

Retail outlets employ more salespeople than other branches of selling.

Retail salespeople also have the highest rate of turnover.

Characteristics of wholesale selling

Wholesale salespeople sell merchandise to wholesalers, dealers, purchasing agents, and store buyers.

The salesperson goes to the customer.

Salaries are usually supplemented by commissions.

Wholesale salespeople sell several products or lines of products.

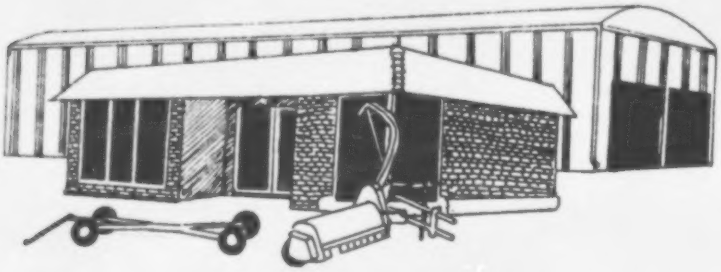
FARM SUPPLY

FARM SUPPLY

FEED & FERTILIZER

FEED & FERTILIZER

There are about half as many wholesale salespeople as there are salespeople in the U.S.



IMPLEMENT
DEALERSHIP

Characteristics of service selling

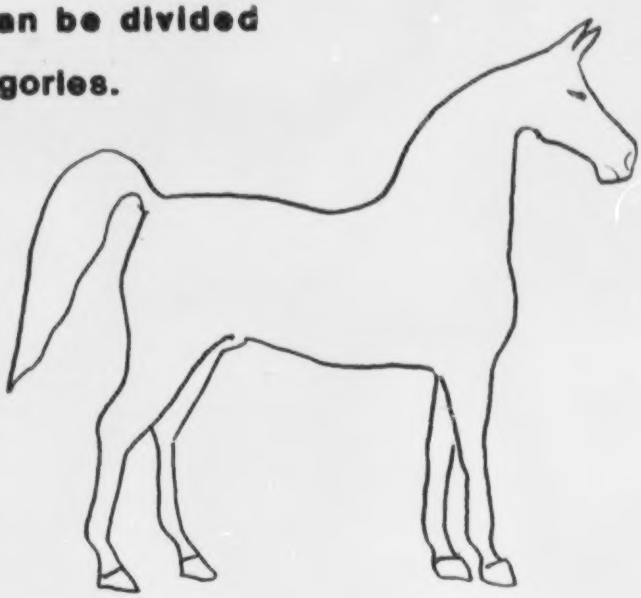
Service salespeople sell services.

Frequently service selling positions are just routine jobs, with the techniques of selling applied.

Service salespeople are generally paid a salary.

It is easier to get a job in service selling than in specialty selling.

Service salespeople can be divided into three basic categories.



Personal services

Business services

Repair services

Characteristics of specialty selling

A specialty salesperson sells only one special product or line of products.

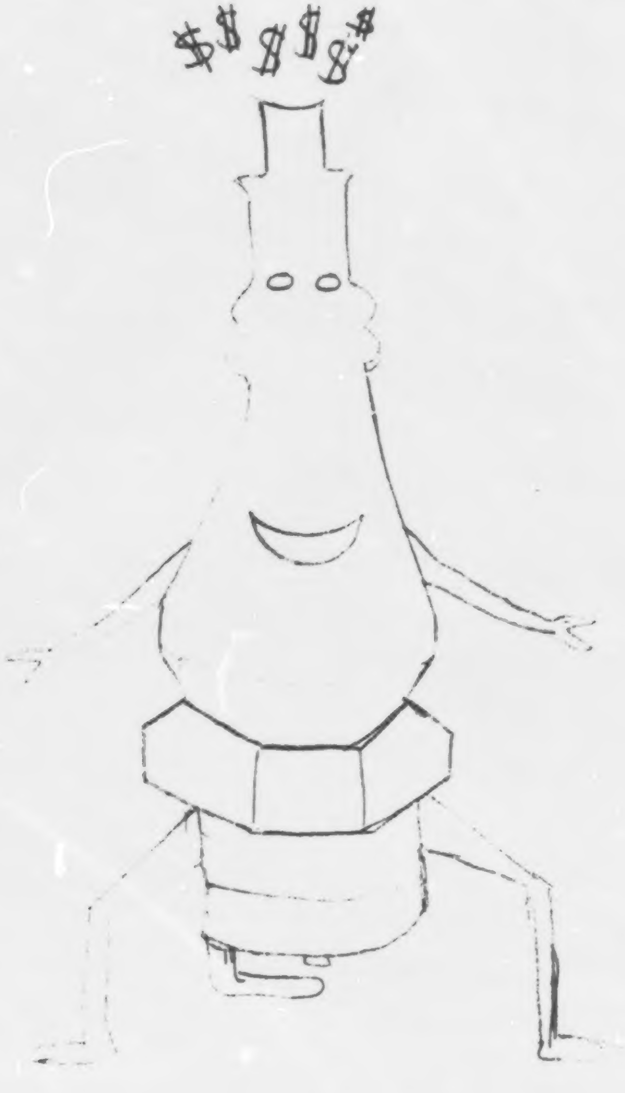
The salesperson must seek out the customers and motivate them to buy.

Specialty selling is the most difficult of the four types of selling.

Salary is composed basically of commissions.

Experience and/or training are usually required.

THE SALESPERSON: SPARK PLUG



OF THE AMERICAN ECONOMIC SYSTEM OF FREE ENTERPRISE

UNIT: SALES

PROBLEM II - To be successful at selling which attributes should I possess?

Study Questions:

1. What are the effects of personal and moral traits on selling?
2. What personal skills must a salesperson possess?
3. What is the most important part of any salesperson's career?

References and Materials:

1.
2.

Instructional Materials:

1. Salesmenship-II transparency masters (TM-1, 2, and 5).
2. Self-Analysis of Physical Characteristics (ACT-4).
3. My Sales Personality Balance Sheet.
4.

Interest Approach:

A. Show TM-1 and ask the class which salesperson would they rather buy from?

B. Have students observe people involved in sales in local agricultural businesses and attempt to identify characteristics which are common to a successful salesperson.

Learning Activities:

1. Have students list some of the personal and moral traits they feel would be desirable and those they feel would be undesirable. (Use TM-2 as a discussion starter, show TM-5 to summarize this activity.)
2. Have students complete "My Sales Personality Balance Sheet." This activity will allow a student to take a complete stock of himself or herself (ACT-3). Discuss how the twenty personality traits relate to being a good salesperson.

3. Have students complete "Self-Analysis of Physical Characteristics." Explain how a salesperson's physical appearance affects their selling ability. (Use ACT-4 and TM-1.)

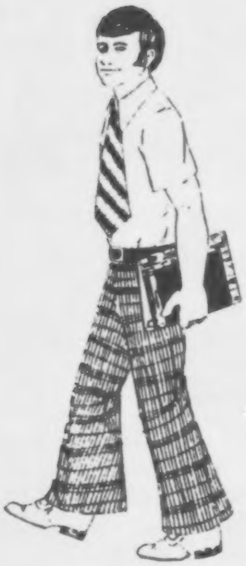
Conclusion: Explain the effects of physical and moral characteristics on selling.

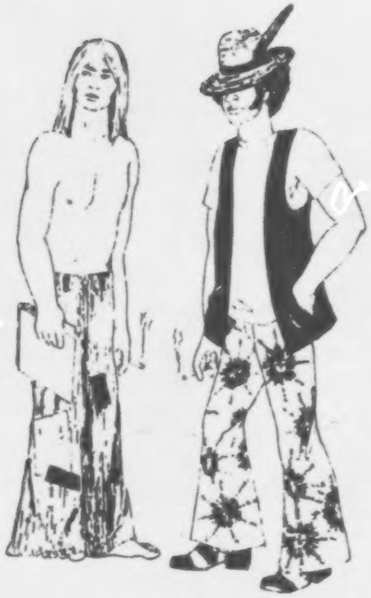
Evaluation Criteria: As a result of the instruction, the student should possess the following abilities.

1. List 10 physical traits that can affect your personality.
2. Why is a salesperson's personality important to his or her career?
3. List 10 positive personality traits of a successful salesperson.

Optional Learning Activities:

1. Students role play desirable and undesirable personality and appearance traits and social graces.
2. Have students name people known by other students who are sincere. Students tell why they feel that these people are sincere.





Which of these people
would you prefer
to make a purchase from?

A Salesperson Should Be --

ALERT

CHEERFUL

COOPERATIVE

COURTEOUS

DEPENDABLE

ENTHUSIASTIC

HONEST

INDUSTRIOUS

FOLLOW-UP AND EVALUATION

Through evaluating the preparation needed in making the agricultural business sales approach, it is important to tie together the student's personality and the traits he or she will need in selling.

1. An evaluation in the form of "My Sales Personality Balance Sheet" is a sound step in the right direction. Included with the actual balance sheet method is a definition of terms sheet which will make it possible for the student to take a complete stock of himself.

MY SALES PERSONALITY BALANCE SHEET[1]

Assets -- Qualities to be Developed

My Rating

1. Alertness . . . . _____
2. Cheerfulness . . . . _____
3. Cooperation . . . . _____
4. Courtesy . . . . _____
5. Dependability . . . . _____
6. Enthusiasm . . . . _____
7. Honesty . . . . _____
8. Industry . . . . _____
9. Initiative . . . . _____
10. Interest in others . . . . . . _____
11. Intelligence . . . . _____
12. Loyalty . . . . _____
13. Memory . . . . _____
14. Orderliness . . . . _____
15. Patience . . . . _____
16. Personal appearance . . . . . . _____
17. Poise . . . . _____
18. Sense of humor . . . . _____
19. Sincerity . . . . _____
20. Tact and Diplomacy . . . . _____

Asset Rating:

10-Exceptional
8-Superior
6-Average
4-or below--Inferior

Total Assets __________

---

[1] Sales Personality Balance Sheet, Mr. Glenn Hansen, Department of Business and Business Education, Northern Iowa University, Cedar Falls.

Liabilities -- Traits to be Guarded Against

	My Rating
1. Annoying mannerisms	_____
2. Familiarity	_____
3. Giving excuses	_____
4. Indifference	_____
5. Procrastination	_____
6. Jealousy	_____
7. Rudeness	_____
8. Tendency to argue	_____
9. Tendency to complain	_____
10. Lack of self control	_____

Liability Rating:

0-Never
4-Occasionally
6-Frequently
8-Habitually
10-Always

Total Liabilities __________

COMPUTATIONS...Total Assets (carried forward)...______

Total Liabilities (carried forward)...______

Net Balance ....______

DEFINITION OF TERMS FOR PERSONALITY BALANCE SHEET
- ASSETS -

1. Alertness--Being wide awake; keeping your "eye on the ball."
2. Cheerfulness--Having a happy disposition.
3. Cooperation--Working with others willingly.
4. Courtesy--Politeness.
5. Dependability--Reliable; trustworthy.
6. Enthusiasm--Showing a keen interest.
7. Honesty--Open and above board.
8. Industry--Finding jobs to do without being told.
9. Initiative--Self-starting; working on your own.
10. Interest in others--A liking for people.
11. Intelligence--Ability to meet a new situation; comprehension.
12. Loyalty--Faithfulness.
13. Memory--Ability to recall quickly, the power to remember.
14. Orderliness--Keeping things "ship-shape."
15. Patience--Keeping cool; "Don't race your motor."

16. Personal Appearance--Well groomed.
17. Poise--Ability to handle yourself correctly in a situation.
18. Sense of humor--Being able to see the funny side of a situation.
19. Sincerity--Being genuine; being what you appear to be.
20. Tact and Diplomacy--Saying and doing the right doing.

- LIABILITIES -

1. Annoying Mannerisms--Little things that annoy others.
2. Familiarity--Overstepping social conventions.
3. Giving Excuses--Passing the buck.
4. Indifference--A lack of concern and interest.
5. Jealousy--Not willing to give the other person credit for a job well done.
6. Procrastination--Delaying, holding out.
7. Rudeness--Impoliteness, hurting the other person's feelings.
8. Tendency to Argue--Always taking the opposite viewpoint.
9. Tendency to Complain--Fault finding.
10. Lack of self control--Losing your poise and manners.

---

2. Next, the student could evaluate his or her sale traits by filling out a check-list on different customer approaches:[2] (The manner of the approach should always be sincere.)

Place an "X" before the statements that you think are good.
Place a "P" before those you think are poor.
Place a "Q" before those you think are questionable.

_____ 1. Are you looking for something?
_____ 2. Is anyone helping you?
_____ 3. Good Morning, Mrs. Jones, may I help you?
_____ 4. Are you being taken care of?
_____ 5. May I show you something?
_____ 6. May I help you?
_____ 7. Something for you?
_____ 8. Anything in particular you want?
_____ 9. Now, dearie, what may I do for you?
_____ 10. Are you next, lady? (Are you next, mister?)

[2] Course of Study in Agricultural Occupations, Harold Binkley, Department of Agricultural Education, University of Kentucky.

_____ 11. Do you wish attention?

_____ 12. Something in the chemical line?

_____ 13. What do you want?

_____ 14. One fifty?

_____ 15. Yes, Ma'am or Yes, Sir?

_____ 16. Are you looking or do wish to buy something?

_____ 17. Can I tempt you with anything today?

_____ 18. Good morning?

_____ 19. This is a dandy value?

_____ 20. Is someone waiting on you?

---

3. Another method of evaluating is by discussing in class the five sales approach steps and how they apply to each situation.

Name ______________________

Date ______________________

Rating ____________________

SELF ANALYSIS OF PHYSICAL CHARACTERISTICS[1]

Frequently we offend others unknowingly. The list below was compiled from the results of hundreds of answers to the question, "What physical traits keep people from presenting a good appearance and hence hurt their personalities?" Place a check mark before each thing that applies to you.

______ Dirty fingernails

______ Dirty hands

______ Beard

______ Yellow or unclean teeth

______ Visible blackheads

______ Pimples on face

______ Dirty neck

______ Dirty ears

______ Greasy hair

______ Dirty scalp

______ Dandruff

______ Hair too long

______ Ragged fingernails

______ Dirty shirt

______ Soiled underclothes

______ Baggy trousers

______ Unshined shoes

______ Dirty, dusty shoes

______ Body odor

______ Halitosis

______ Too few baths

______ Inappropriate clothes

______ Stoop shoulders

______ Awkward position

______ Hair not combed

______ Greasy skin

______ Broken shoestring

______ Buttons missing

______ Clothes fitting poorly

______ Dirty handkerchief

______ Dirty collar and cuffs

______ Run-over heels

Number of checks __________

If you checked fewer than five checks, you are neater and better groomed than the average college student.

If you checked between five and ten items, you are below average in neatness and should do something about it.

If you checked more than fifteen, you are in pretty bad shape. Drastic action is necessary.

Look over the items that you checked. Each one is a personality defect in the eyes of other persons. Each defect can be eliminated.

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[1] Course of Study in Agricultural Occupations, University of Kentucky, Lexington, Kentucky.

Personal Honesty is the important characteristic of a successful salesperson.

People will depend on you to be honest with them about your products and their needs.

A good salesperson never violates this trust.

UNIT: SALES

PROBLEM III - As a salesperson, how would I identify new customers and keep existing customers?

Study Questions:

1. Why is it important that a salesperson remember customers' names and faces?
2. What are some avenues that a salesperson may use to identify potential customers?
3. How does a salesperson get repeat business?

References and Materials:

1. Sales (TM-1, 3, 4)
2. Names Mean Sales (INFO-2)
3. Gathering Information About the Customer (ACT-5, INFO-2)

Interest Approach:

Ask four strangers to pay your class a visit, preferably these visitors should be agricultural salespersons. Begin the class by introducing the four visitors to the class members, giving their names and occupations. Following the introductions, ask the class members to name each visitor and give their occupation.

Learning Activities:

1. As a continuation of the interest approach, show TM-1. Discuss why remembering customers' names is important to a salesperson's success. (Use INFO-2) Ask students to name some methods which will help them to remember people's names.
2. Using TM-3, explain how a salesperson utilizes various channels to locate potential customers.
3. Have students name their favorite salesperson or store, and explain why it's their favorite. Use TM-4 to illustrate the importance of keeping the customer satisfied.

4. Have students complete ACT-5. Discuss with the class their methods of attaining the information asked for in ACT-5. (INFO-2) Ask students to determine which type(s) of agricultural products the customers they selected would be most likely to purchase. Students should explain their answers.

Conclusion:

Explain why remembering customers' names is so important to a successful salesperson.

Evaluation Criteria:

As a result of the instruction, the student should possess the following abilities:

1. List some sources that salespeople may use to identify potential customers.
2. Explain the importance of remembering customers' names and faces.
3. Explain the importance of a satisfied customer.
4. Explain the importance of gathering pertinent information concerning a potential customer.

Optional Learning Activities:

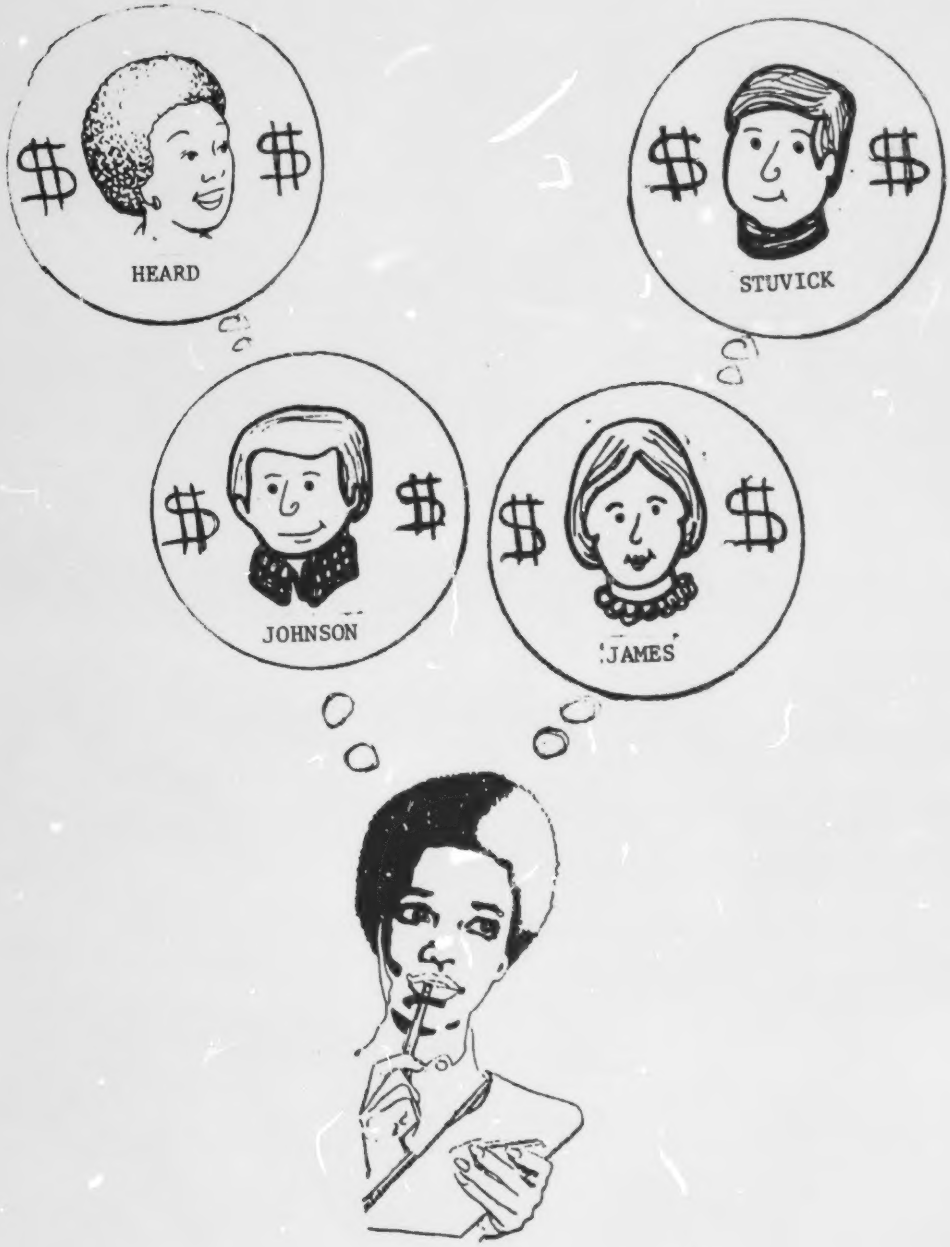
1. Students describe how they meet new people.

2. Students in groups of two to four attend specific community meetings for the purpose of compiling a list of prospective customers for a farm supply center. Assume the roles of salespersons, discovering the potential customers without divulging the purpose. Each student reports the experience and presents a list of prospects, giving pertinent data about each.

3. Students examine newspapers serving the community and list prospective customers for the farm supply center which can be gleaned from them. Write plans for contacting these prospects, explaining the method of making the contacts and presenting the material to be used. For example, if letters or telephones are used, include a plan of what is to be said.

4. Take a field trip to observe people working who have to meet customers as part of their job.

5. Role play "meeting the customer".
6. Invite a successful salesperson to speak to the class on the importance of selling, characteristics of a salesperson, and locating and approaching customers.


HEARD
STUVICK
JOHNSON
JAMES
$

NAMES MEAN SALES

A. Names Mean Sales

It is a fact that people like to hear their names. Mispronouncing a person's name is forgivable, but addressing customers by the wrong name can offend them. How can a salesperson expect to sell a customer anything after offending him or her by calling them by the wrong name? When you call a customer by name, you say to them, "You are important".

B. Gathering Information About the Customer

A successful salesperson gathers as much personal information about a potential customer as possible and places it on a file sheet. The information helps the salesperson to evaluate the customer's needs and develop a sales strategy.

Some items that may be included on such a file sheet are:

1. Name and address
2. Age
3. Education
4. Civic organization membership
5. Best time to be contacted
6. Personal characteristics
7. Need for what it being sold or service rendered
8. Purchasing habits
9. Family habits
10. Religious activities
11. Interests

Reference: Salesmanship in Agricultural Occupations, Department of Agricultural Education, Iowa State University, Ames, Iowa.

A SALESPERSON MAY USE THE FOLLOWING CHANNELS TO IDENTIFY POTENTIAL CUSTOMERS

A. Local newspaper

B. Credit bureaus

C. Former customer's recommendation

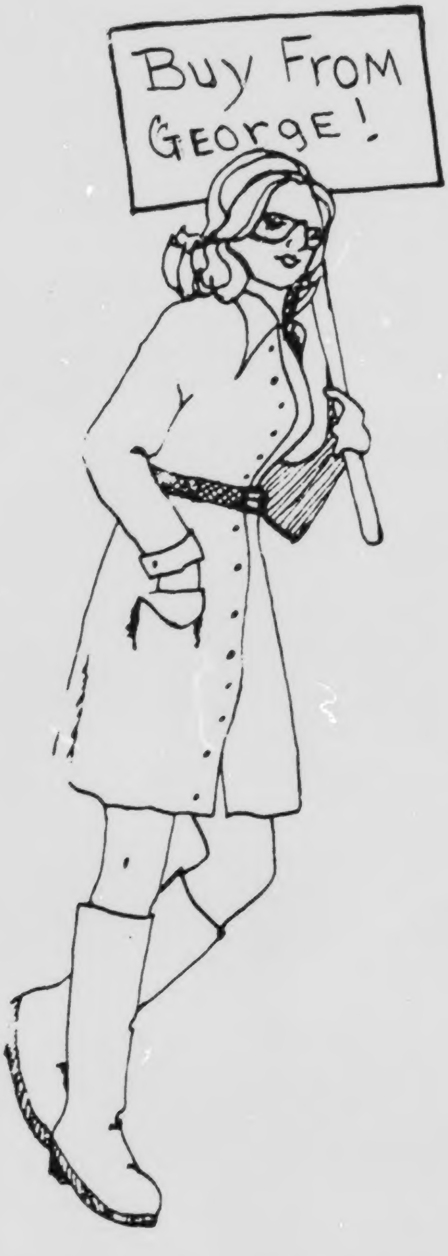
D. Directories

E. Other salespersons

F. Personal customer information file

G. Customer observation and common sense

A FUNDAMENTAL RULE OF GOOD SELLING IS TO KEEP THE CUSTOMER HAPPY.


Buy From George!

SATISFIED CUSTOMERS TELL OTHERS

Situation

You are a salesperson gathering information on a potential customer.

Procedure

1. Select a person in the community to serve as your customer.
2. Gather the following information about the person you selected.
    a. Name
    b. Address
    c. Age
    d. Education
    e. Civic Organization Membership
    f. Best time to be contacted
    g. Select an item or service you feel this person would purchase
    h. Family Facts
    i. Interest
3. Bring information to class.

UNIT: SALES

PROBLEM IV - To be an effective salesperson, what knowledge of people should I possess?

Study Questions:

1. What motivates people to make purchases?
2. How does a salesperson handle customer objections?
3. What are the implications of the customer's buying motives and potential objections for a salesperson planning a sales presentation?
4.
5.
6.

References and Materials:

1. Salesmanship (TM-1, 2, 3)

Interest Approach: Bring an expensive tool or instrument (such as a tachometer) to class and ask the students which one of them would like to purchase the item (tell them what the item cost). Chances are that none of them will be willing to pay $_____ for a tachometer, but to a mechanic that item is an indispensable tool. Need is the underlying reason for most agricultural purchases. (Say to the students) need is the underlying reason for most agricultural purchases. You don't need a tachometer, so you aren't willing to purchase it. The same principle holds true for the farmer; he or she will purchase only the tools, equipment, machinery and chemicals that he or she feels are needed.

Learning Activities:

1. To demonstrate the motivating effect a sales presentation can have on a customer, instruct the students to select an item from the shop and prepare a brief sales presentation highlighting the selling points of the item. Instruct students to keep in mind the points highlighted in TM-1.

2. Have students role play. Select three different types or brands of any item. For example, give students three different brands of circular saws. Have students determine which circular saw would be most appealing to a carpenter. Students should base their selection on the item, selling points, advantages and disadvantages, and use of the item. Enforce the importance of knowing the facts about a product with TM-2.

3. Have each student outline a sales presentation. Select a piece of farm equipment. Instruct each student to prepare a brief presentation for the piece of equipment. Have class members present their presentations while other class members point out possible objections. The salesperson should be ready to handle all customer objections. (Use TM-3).

Conclusion:

Explain what motivates a customer to buy.

Evaluation: As a result of this lesson, students should be able to:

1. List the reasons for customer objections.

2. Explain why a salesperson should know the facts about a product.

3. Explain how can a salesperson appeal to customer interest.

Optional Learning Activities:

1. Invite a successful farmer to discuss his relationship with a salesperson to the class.

2. Students select a product and farm situation and write need development questions.

3. Select a list of items commonly sold in a farm supply center in a locality. Indicate for each item the motive which would dominate in causing a customer to purchase the item.

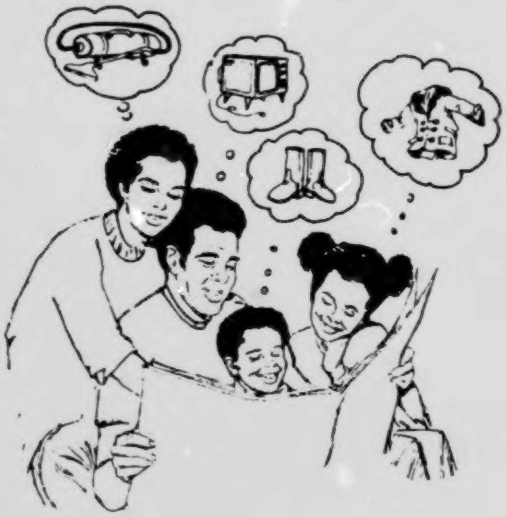
4. Visit a local store. Without interfering, try to identify and record the motives that prompted customers to buy.

5. Prepare a demonstration to show how to appeal to a customer who would be motivated by the "ease and convenience" motive, the "safety" motive, or the "profit" motive.

6. Students list a reply to the following objections concerning a product:

   a. The price is too high.
   b. This color will not go with what I have.
   c. Are you sure this will work?
   d. Is this one as good as that one?
   e. Doesn't this come in a smaller can?
   f. What will happen if this stops running?

A salesperson appeals to customers by showing how a product contributes to:



NEEDS

WANTS

DESIRES

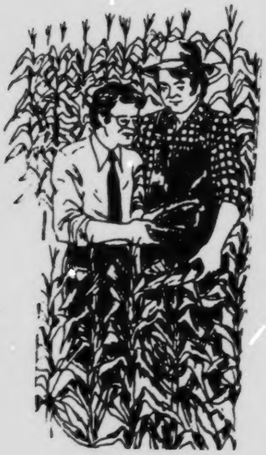
INTEREST

A salesperson demonstrates what can be gained by purchasing the product

A SALESPERSON SHOULD KNOW THE FACTS ABOUT A PRODUCT TO:

- GAIN SELF-CONFIDENCE
- DETERMINE SELLING POINTS
- ANSWER CUSTOMER'S QUESTIONS
- PREPARE SALES PRESENTATION

A SALESPERSON WHO KNOWS ALL THE FACTS ABOUT THE PRODUCT IS BEST EQUIPPED TO HANDLE CUSTOMER OBJECTIONS.



ALL REASONS FOR SALES OBJECTIONS FALL INTO THE FOUR "NOs"

NO NEED

NO WANT

NO MONEY

NO HURRY

BEFORE ANSWERING AN OBJECTION:

LISTEN CAREFULLY

ACT INTERESTED

DON'T ARGUE

DON'T HURRY TO ANSWER

DON'T BELITTLE IT

UNIT: SALES

PROBLEM VI - What store skills will I need to become an employee in an agricultural supply business?

Study Questions:

1. What are some common terms used in retail store selling?
2. What are some skills commonly needed to be a behind-the-counter salesperson?
3.
4.
5.
6.

References and Materials:

1. Sales VI, ACT-1, ACT-2, ACT-3.
2.
3.

Interest Approach: Select a popular neighborhood grocery store and ask the students if they know where to locate an uncommon item such as a box of baking soda. Chances are most of them won't know where the item is located; but as a store salesperson it would be their job to know where all the products are located.

Learning Activities:

1. To help make learning common store terminology fun, use ACT-1.
2. Have students write a report on "What I Most Dislike in Sales Clerks". Have students present these papers aloud and invite discussion. Direct discussion towards ways to improve behind-the-counter selling skills. (ACT-2)
3. The following abilities are commonly needed by a behind-the-counter salesperson: 1) ability to make change and count it back to the customer, 2) ability to compute the total of a customer's purchase, 3) ability to compute the correct amount local, state and federal taxes that must be applied to a customer's purchase, and 4) the ability to weigh and/or measure quantities

of produce. These skills will be improved once a salesperson is actually on the job but to introduce these abilities and to demonstrate what knowledge is required to master these abilities, use ACT-3.

Conclusion: List four skills required of a behind-the-counter salesperson.

Evaluation: As a result of this lesson, students should be able to:

1. Define the sales terms listed in ACT-1.
2. Explain the duties of a behind-the-counter salesperson.
3. Make change.
4. Determine the cost of goods sold in quantities such as pounds, inches, feet, ton, etc. and do simple metric conversions.
5. Properly greet and offer customers assistance.

Optional Learning Activities:

1. Role play retail selling. Have students count change, wrap purchases and other activities associated with counter selling.
2. Have students greet and assist customers in assessing their needs.
3. Have students practice on a cash register.

MIXING AND MATCHING RETAIL STORE TERMS

Objectives

1. To define the following common retail store terms: sale, selling retail, merchandising, staple goods, foward stock, open stock, special purchase, close-out, distress merchandise, loss leader, one-price policy, fair-trade policy, price line, commission, inventory, quota, stock room, price tay, lock tag, credits, credit check (telephone), call system, tally, house organ, shopper, "General", demonstrator and accommodation desk.
2. To demonstrate to youth the importance of learning common store terminology.

Materials

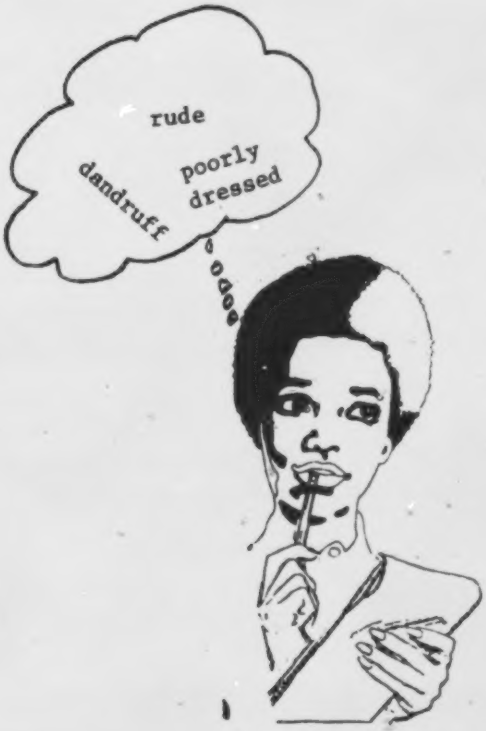
Index cards which have a store term or definition on them (one definition card for each term card).

Procedure

1. Opening Comment - Don't be misinformed, know your store terminology.
2. Pass out a card to each member.
3. Instruct each person holding a term card to call out that term (for example, "Quota").
4. The person holding a definition card that seems to describe the term reads it aloud or acts out the definition or term.

WHAT I MOST DISLIKE IN SALES CLERKS

You have been a consumer of goods and products since the day you were born. Your assignment is to write a short paper listing the characteristics you dislike most in sales clerks, be prepared to present your paper orally.


rude
poorly dressed
dandruff

Objective

To demonstrate to youth four of the basic abilities needed by a behind-the-counter salesperson; 1) ability to compute the total of a customer's purchase, 2) ability to make change and count it back to the customer, 3) ability to compute the correct amount of local, state and federal taxes that must be applied to a customer's purchase, and 4) the ability to weight and/or measure quantities of produce.

Materials

A copy of Store Skills for each student.

Procedure

1. Pass out a copy of Store Skills to each student.

2. Instruct each student to read the directions and ask questions if they don't understand any items. After the students have completed the activity, discuss the skills with them especially the ones they had problems with.

STORE SKILLS

Explanation

To be a behind-the-counter salesperson, there are many skills that one must master. The following activities are designed to improve four of the common store skills.

Directions

Please complete the following activities.

Section I

Solve the following problems:

1. Tom went to the store to purchase some apples. The apples were marked at 54¢ per lb. Tom has $1.08 to spend. What would be the average weight of each apple if five cost $1.08.

2. Farmer Joe wanted to buy 2.5 tons of hog rations. If the feed was sold in hundred lb. sacks, how many sacks would farmer Joe have? If the 2.5 tons cost $519.00, how much did each sack cost?

3. If a customer came into a store and purchased 50 bags of fertilizer at $7.50 per sack plus 50 lbs. of fence staples for $26.07 plus a salt block for $9.33 and 20 fence posts for $3.18 each, how much change would he get back from $500.00?

4. Mary went to the flower shop to purchase some rose plants. The balance on her charge account at the flower shop was $22.13 before she made her purchase. She bought 4 rose plants at $1.89 each. Mary handed the store clerk $5.00 and asked he to put the rest on her account. How much was the new account balance?

5. How much is the sales tax in your town on A) $1.00, B) $.75, C) $.50, D) $.25, and E) $.15?

6. John went to the seed store to purchase 5 sacks of corn seed. He read an ad in the paper which said the seed cost $28.90 per hundred lb. sack, so went to the seed store with $145.00 but found that when the clerk added the sales tax he didn't have enough money. How much additional money did John need to cover the tax? (Make your computation based on local sales tax rates.)

7. If a customer came to a store to purchase $20.00 worth of 6 penny nails, how many pounds would he get if the nails cost 40¢/lb?

8. If a customer went to a store to purchase 50 ft. of rope which costs $.43/ft., how much change would he get back from $25.00 if the sales tax was .06 per dollar?

9. The official unit of measurement in the United States is the metric system. Do you know the following?

A. 1 in. = _______ CM

B. 1 lb. = _______ grams

C. Are the meter and the yard equal unites of measurement?

________ Yes ________ No

10.	A)	$12.50	B)	$ .69	C)	$7,621.00	D)	$8.79
		11.10		.93		3,421.09		X 8
		12.36		.42				
		+ 14.12		+ 7.03				

E) 1,110 in. = ________ ft.   F) 192 oz. = ________ lb.

KEY

1. 6.4 oz.

2. A) 50 B) $10.38

3. $26.00

4. $24.69

5. Tax rates may vary from city to city so check your local tax rates.

6. Make computation based on local tax rates.

7. 50 lb.

8. $2.21

9. A) B) C) No

10. A) $61.96 B) $9.07 C) $4,199.91 D) $70.32

E) 92.5 ft. F) 12 lb.

UNIT: SALES

PROBLEM VII - What steps should I follow when planning a sales strategy?

Study Questions:

1. What are some important items to consider when organizing the sales effort?
2. How does a salesperson determine the number of clients to visit during the week?
3. What items are included in the sales record.
4.
5.
6.

References and Materials:

1.
2.
3.

Conclusion: Explain why is it important for a salesperson to plan his selling effort well in advance of contacting his first customer.

Evaluation Criteria: As a result of the instruction, the student possess the following abilities:

1. Lay out a weekly schedule of activities for a salesperson under a given situation.
2. Keep the necessary records.
3. Review the salesperson's selling efforts.
4. Set sales goals.
5. Analyze sales competition considering the salesperson's attitudes toward, knowledge of competitors, what is said to the customers about the competitors, and product comparison.

UNIT: BUSINESS RECORDS AND PROCEDURES (BP)

Problem Areas Included:

BP-I.	What basic mathematical problem solving abilities are needed in the agricultural supplies and services area?
BP-II.	How do I make change?
BP-III.	Why is a correct sales ticket needed by a business?
BP-IV.	How do I apply discounts and sales tax to sales?
BP-V.	How are cash registers used in transactions and in checking daily cash balance?
BP-VI.	How are checks and charge cards handled?
BP-VII.	How are computers, calculators and other business machines utilized by an agricultural business?
BP-VIII.	How do businesses determine the price for merchandise to be sold?

References used in this unit:

1. Business Procedures in Agricultural Occupations. 1967. Workshop in Agricultural Education, Iowa State University, Ames, Iowa 50011.

2. Iowa Sales and Use Tax Information Booklet. July, 1980. Iowa Department of Revenue, Hoover State Office Building, Des Moines, Iowa 50319.

3. Teaching Source Units for Cooperative Occupational Education Related Class, Department of Vocational and Technical Education, University of Illinois, July, 1974.

4. Teacher's Guide for Agricultural Supplies, Agricultural Education Service, State Department of Education, Ohio State University, 1968.

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM I - What basic math skills are needed by a successful employee?

Study Questions:

1. What is the importance of mathematics to agricultural supply and service occupations?
2. Why is the ability to do mental math important?
3.
4.
5.
6.

References and Materials:

1. Teacher's Guide for Agricultural Supplies, Agricultural Education Service, State Department of Education, and Department of Agricultural Education, Ohio State University, 1968.
2. BP-I-ACT-1, BP-I-INFO-2; Ag Supply and Service Problems Pretest, Key.
3. BP-I-INFO-3, King/Queen of Math Mountain

Learning Activities:

1. Introduce the problem area using BP-I-ACT-1. This is a pretest showing how every agri-business uses mathematics in normal operations. After students have completed pretest, go over it as a group pointing out the different types of businesses and how to solve the problems.
2. Discuss the importance of doing simple arithmetic quickly and accurately. Use BP-I-INFO-3 to give students practice in mental math.
3.
4.

Conclusion: Have students list the math skills needed by employees in agri-businesses and describe why they are important.

Evaluation: As a result of this lesson, students should be able to:

1. Define the importance of math skills in the agri-business.
2. Explain why the ability to do mental math is important.
3. Solve basic math problems encountered in agri-businesses.
4.
5.
6.

Optional Learning Activities:

1. Basic Math Pretest, BP-I-ACT-4; Key, BP-I-INFO-5. This could be used to determine how much practice the students need in basic arithmetic.
2. Math Review, BP-I-ACT-6; Key, BP-I-INFO-7.

Ag Supply and Service Problems Pretest

1. A seed mixture per acre is: 8# alfalfa (60# per bu.)
   3# red clover (60# per bu.)
   2# timothy (45# per bu.)

   How many bushels of each of these will be needed to sow 30 acres?

   __________ Bu. alfalfa

   __________ Bu. red clover

   __________ Bu. timothy

2. A farmer has oats to sell and needs to buy shelled corn. He sells a truckload of oats (4800#) (32# per bu.) at $1.30 per bu. How many bushels (56#) of shelled corn can he buy with this money when the shelled corn is selling at $3.25 per bushel?

   __________ bushels shelled corn

3. There are 43,560 square feet in an acre. What fraction of an acre is a patch that is 43-1/2 feet wide and 100 feet long?

   __________ acre

4. Some weed killers might be mixed to kill both broadleaves and grasses in the same field. At the rate of 1/2 pint/acre for one chemical and 2 pounds per acre of the second, how many gallons of the one and pounds of the other would be required for a 48 acre field?

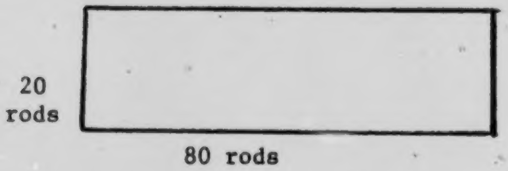
   __________ gallons

   __________ pounds

5. How many cubic yards of concrete will need to be ordered for concreting a shed floor that is 40 feet long and 30 feet wide and 4" thick?

   __________ cubic yards

6. How many 20 rod rolls of fence will be required to fence this field?



   __________ rolls

SOURCE: Teacher's Guide for Agricultural Supplies, Agricultural Education Service, State Department of Education, and Department of Agricultural Education, Ohio State University, 1968.

KEY for Ag Supply and Service Problems Pretest

1. 8# alfalfa/acre x 30 acres = 240 lbs. alfalfa ÷ 60 lbs./bu. = 4 bushels.

   3# red clover/acre x 30 acres = 90 lbs. red clover ÷ 60 lbs./bu. = 1 1/2 bushels.

   2# timothy/acre x 30 acres = 60 lbs. timothy ÷ 45 lbs./bu. = 1 1/3 bushels.

2. 4800# oats sold ÷ 32#/bu. = 150 bu. sold

   $1.30/bu.

   $195 received for oats sold

   $195 ÷ $3.25/bu. corn = 60 bushels of corn may be bought.

3. 43.5' x 100' = 4,350 sq. ft. ÷ 43,560 is approximately 1/10 of an acre.

4. 1/2 pint/acre x 48 acres = 24 pints ÷ 8 pints/gallon = 3 gallons

   2 lbs./acre x 48 acres = 96 lbs.

5. 40' x 30' x 1/3' = 400 cubic feet ÷ 27 cu. ft./yd. = 14.8 cubic yards

6. (2 x 20 rods) + (2 x 80 rods) = 200 rod perimeter ÷ 20 rods/roll of fencing = 10 rolls of fencing

King/Queen of Math Mountain

1. Have 4 students go to blackboard (or whatever number space allows).
2. Have them start facing the blackboard.
3. Read an arithmetic problem.
4. First student to write down answer legibly, put chalk down, and turn around is the winner. In case of ties, winner is the one who wrote down the least amount of the problem.
5. Have other 3 students sit down and 3 new students replace them.
6. Give new problem.
7. Continue for specified amount of time.
8. Winner is student who wins the most challenges. (You may want to put a limit on the number of consecutive wins to give all students a chance to participate.)

Variation - Divide class into four teams and award team points.

4 points for first
3 points for second
2 points for third
1 point for fourth
0 points if not completed

Give an FFA pencil, pen, bumpersticker, etc. as a prize to winning individual or team members.

Basic Math Pretest

1. Add the following columns of numbers:

a)	b)	c)	d)	e)	f)
11	17	13	101	212	374
9	14	28	27	22	1,008
17	3	39	132	109	497
14	2	47	188	315	802
15	15	32	12	99	1,954
20	11	25	58	117	7
12	27	13	97	52	1,452

2. Subtract:

a)	b)	c)	d)	e)	f)
192	211	544	10.03	88.75	403.88
88	47	387	7.58	2.99	10.79

3. Multiply:

a)	b)	c)	d)	e)
8.99	7.75	3,389	1,504	1,765
56	.5	26	1.87	349

4. Divide:

a) 10,742 ÷ 8 =

b) 231 ÷ 11 =

c) 288 ÷ 1.2 =

d) 11,853 ÷ 9 =

e) 22,175 ÷ 2.5 =

5. Percentages:

   a) What is 85% of 192?

   b) What is 77% of 257?

   c) What is 3% of $88.00?

   d) What percentage is 50 of 95?

6. Fractions:

   a) $1/2 + 1/4 + 1/8 =$

   b) $1/7 \times 2/3 =$

   c) $7 \div 1/2 =$

   d) $3/4 \div 2/3 =$

   e) $15/16 - 5/8 =$

KEY for Basic Math Pretest

1. a) 98
   b) 89
   c) 197
   d) 615
   e) 926
   f) 6,094

2. a) 104
   b) 164
   c) 157
   d) 2.45
   e) 85.76
   f) 393.09

3. a) 503.44
   b) 3.875
   c) 88,114
   d) 2,812.48
   e) 615,985

4. a) 1,342.75
   b) 21
   c) 240
   d) 1,317
   e) 8,870

5. a) 163.2
   b) 197.85
   c) $2.64
   d) 52.63%
   e) 190%

6. a) 7/8 or .875
   b) 2/21 or .095
   c) 14
   d) 9/8 or 1.125
   e) 5/16 or .3125

Math Review

1. If cattle are $90.00 per cwt. this means they are __________ per lb.

List the cents per lb. for the following cwt. prices:

a) $ 68.50 per cwt. = __________ per lb.
b) 27.93 per cwt. = __________ per lb.
c) 102.50 per cwt. = __________ per lb.
d) 77.77 per cwt. = __________ per lb.
e) 110.00 per cwt. = __________ per lb.

Note: cwt. = 100 lbs.

2. Interest is figured at a certain % for a period of one year. Example: you borrow $900.00 at 10% for one year the interest would be $90.00 (900 x .10 = $90.00).

Do the following problems:

a) $ 767.00 x 11% interest = $__________ interest per year.
b) 623.00 x 9% interest = $__________ interest per year.
c) 1,063.00 x 10% interest = $__________ interest per year.
d) 987.44 x 11.5% interest = $__________ interest per year.
e) 880.00 x 11.5% interest = $__________ interest per year.

3. To find the dollars of interest for a portion of a year, one way is to find the annual interest, divide this by 365 (the days in a year) and multiply this answer by the days you have the money borrowed. You need to carry the answers out to at least 4 decimal points except in the final answer.

Example: You borrow $767.00 for 283 days at 11% interest.
$767.00 x 11% = $84.3700 annual interest
$84.37 ÷ 365 = $.2311 interest per day
$.2311 x 283 = $65.40 interest for 283 days

a) $ 988.00 @ 11% for 266 days __________
b) $1,125.00 @ 13% for 27 days __________
c) $ 763.50 @ 10% for 290 days __________
d) $1,500.00 @ 9% for 450 days __________
e) $7,000.00 @ 12.5% for 410 days __________

4. When you know the selling weight and the total dollars received, you find the price per lb. by dividing the dollars received by selling weight.

Example: You received $800.00 for a 1,100 lb. steer.
$800.00 ÷ 1,100 = $.7272 per lb. or $72.72 per cwt.

List the price per lb. and per cwt for the following transactions:

a) $864.00 for 1080# steer = $____________ per lb. or
____________ per cwt.

b) $764.30 for 990# heifer = $____________ per lb. or
____________ per cwt.

c) $969.00 for 1,200# steer = $____________ per lb. or
____________ per cwt.

d) $863.90 for 1,130# steer = $____________ per lb. or
____________ per cwt.

e) $925.00 for 1,000# steer = $____________ per lb. or
____________ per cwt.

SOURCE: Rudy Engstrom, Vo-Ag Instructor, Lake City, Iowa

KEY for Math Review

1. 90¢
    a) 68.5¢
    b) 27.93¢
    c) $1.025
    d) 77.77¢
    e) $1.10

2. a) $84.37
    b) $56.07
    c) $106.30
    d) $113.56
    e) $101.20

3. a) $79.20
    b) $9.62
    c) $60.66
    d) $166.44
    e) $982.88

4. a) .80, 80.00
    b) .772, 77.20
    c) .8075, 80.75
    d) .7645, 76.45
    e) .925, 92.50

UNIT: BUSINESS RECORDS AND PROCEDURES

Problem II - How do I make change?

Study Questions:

1. Why is it important that the customer receive correct change?
2. What is the procedure used for making change?
3.
4.
5.

References and Instructional Materials:

1. BP-II-ACT-1, money crossword puzzle
2. BP-II-TM-2, Steps in Making Change
3. BP-II-INFO-3, How to Make Change
4. BP-II-ACT-4, BP-II-INFO-5; Making Change, Key
5. BP-II-TM-6, Do's and Don'ts of Making Change

Interest Approach: Use BP-II-ACT-I to get students thinking about money. Lead into a discussion on the importance of making change.

Learning Activities:

1. Use BP-II-TM-2 and BP-II-INFO-3 to lead a discussion on the procedure for making change.
2. Have students practice making change with real money in front of the class. Have the rest of the students watch for mistakes. You may want to use a tape recorder or videotape to show the students how they did.
3. Use BP-II-ACT-4 to give students further practice in making change.

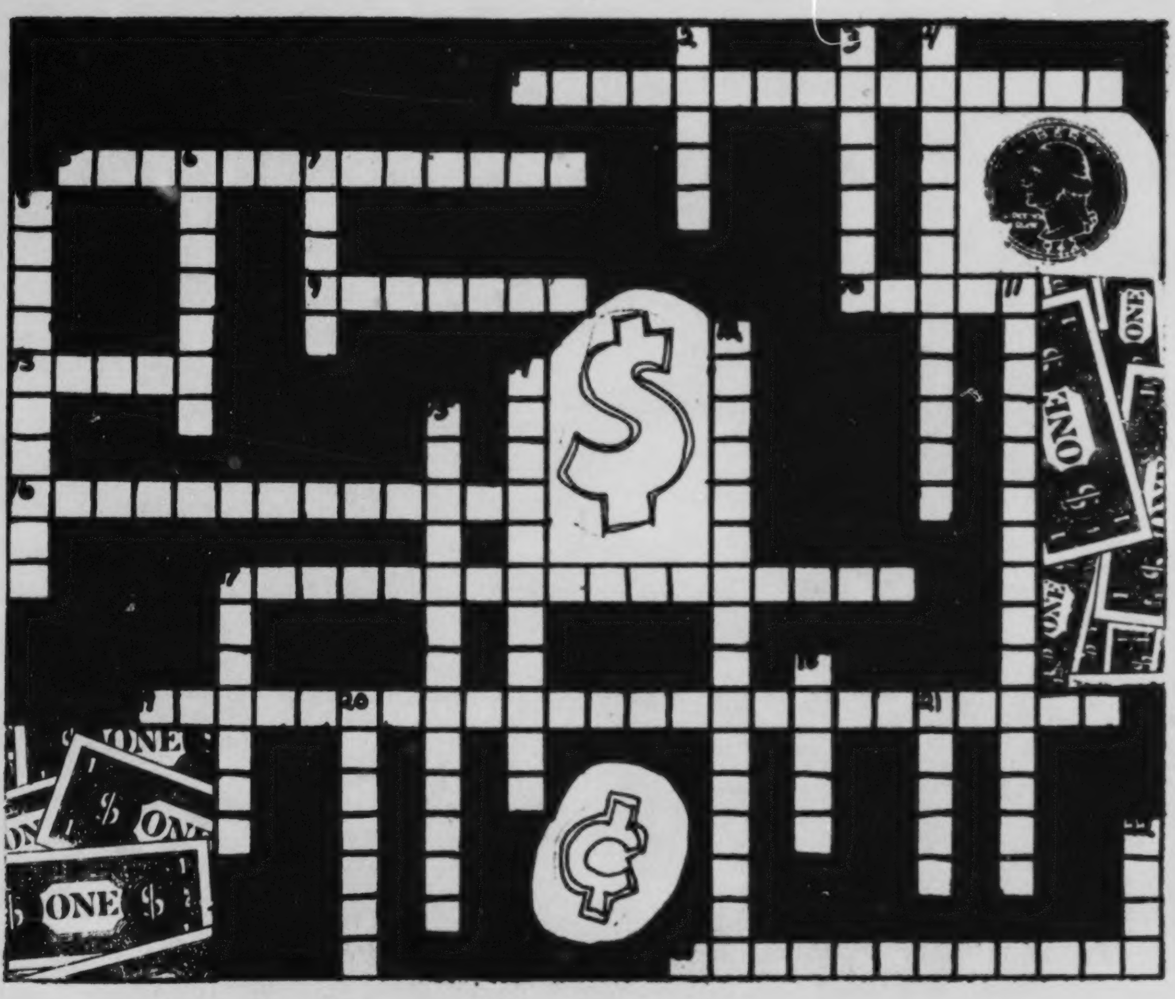
Conclusion: Use BP-II-TM-6 to summarize the important points in making change. Reinforce the necessity of giving the customer the correct change.

Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of giving the correct change.
2. List the steps in making change.
3. Give the correct change for a given situation.

Optional Learning Activities:

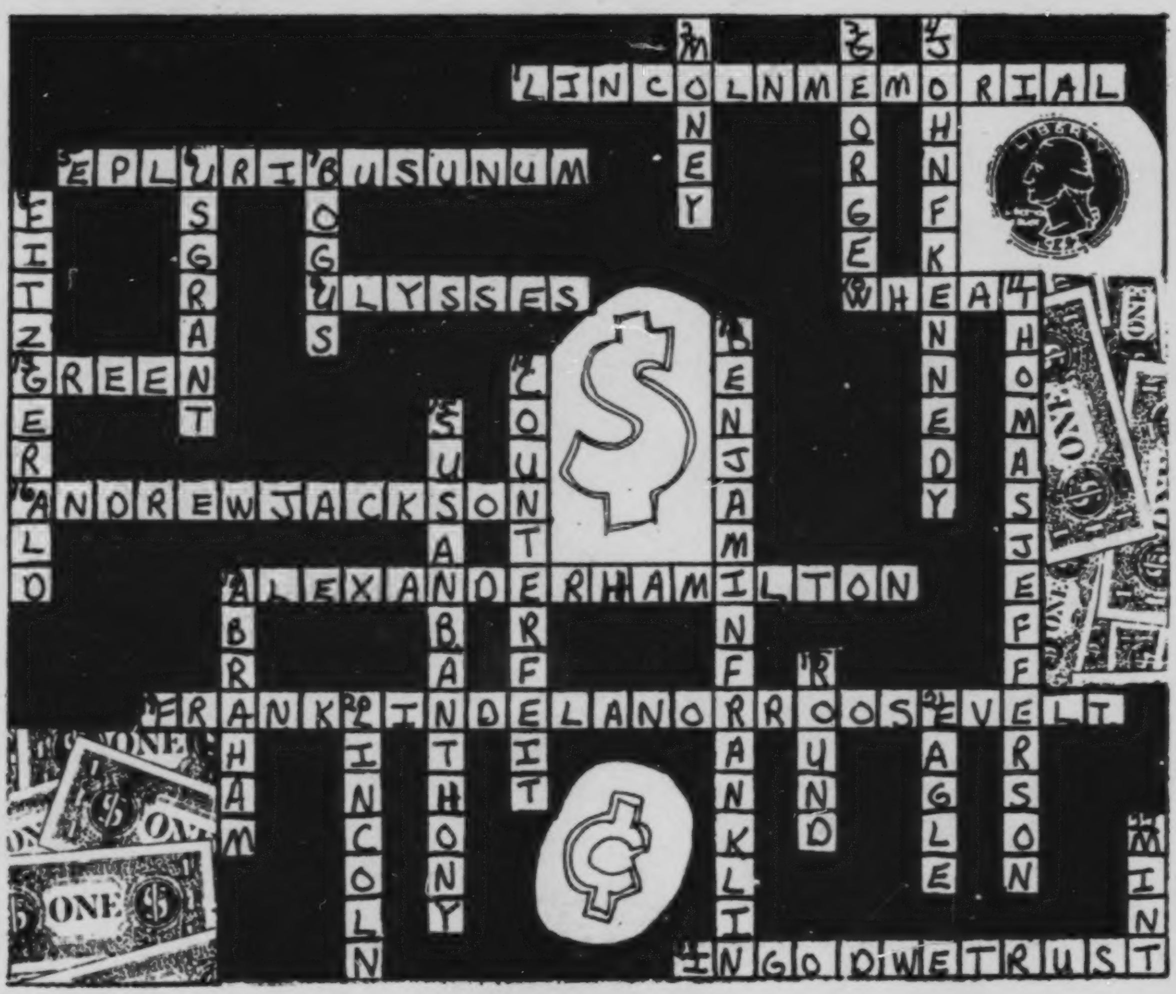
1. Have a teller from a bank come in and give a demonstration on making change.



ACROSS
1. On back of current penny
5. Motto on coins that means one composed of many
9. 6 down's first name
10. On back of pennies made before 1957
13. Color of money
16. Person on $20 bill
17. Person on $10 bill
19. Person on dime
23. Motto on most money

DOWN
2. What this puzzle is about
3. Person on $1 bill
4. Profile is on half dollar
6. His picture is on the $50 bill
7. Fake money
8. 4 down's middle name
11. Person on $2 bill and nickel
12. Person on $100 bill
14. Fake money
15. Woman on dollar coin
17. First name of person on $5 bill
18. Shape of coins
20. Last name of person on $5 bill
21. On back of quarter
22. Where money is made

KEY


LINCOLN MEMORIAL
E PLURIBUS UNUM
ULYSSES
WHEAT
GREEN
ANDREW JACKSON
ALEXANDER HAMILTON
FRANKLIN DELANO ROOSEVELT
IN GOD WE TRUST
MONEY
GEORGE
JOHN F KENNEDY
FITZGERALD
S GRANT
BOGUS
SUSAN B ANTHONY
COUNTERFEIT
BENJAMIN FRANKLIN
THOMAS JEFFERSON
ABRAHAM
LINCOLN
ROUND
EAGLE
MINT
ONE
LIBERTY

ACROSS
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15. Woman on dollar coin
17. First name of person on $5 bill
18. Shape of coins
20. Last name of person on $5 bill
21. On back of quarter
22. Where money is made

STEPS IN MAKING CHANGE

1. Inform customer of amount of total sale.

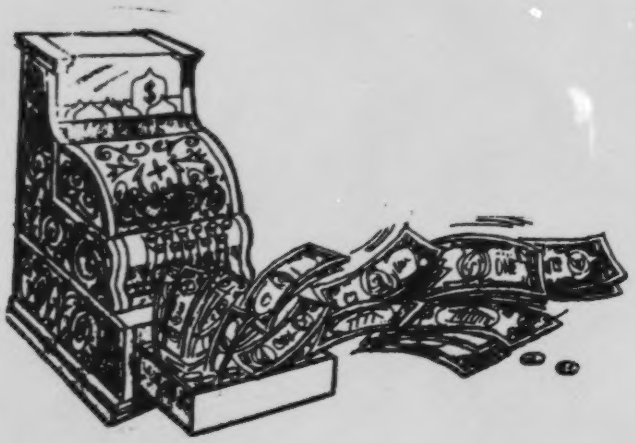
2. Lay money received on cash register.

3. Calculate the amount of change.

4. Get change from drawer - use as few bills and coins as possible.

5. Count the change back to the customer.

6. Thank the customer for their business.



HOW TO MAKE CHANGE

CLERK: The total is five dollars and thirty-two cents.

CUSTOMER: Here (hands clerk a \$5 bill, and a \$1 bill).

CLERK: \$5.32 from \$6.00. Here's your change. \$5.32 (hands penny) \$5.33, (hands penny) \$5.34, (hands penny) \$5.35, (hands nickel) \$5.40, (hands dime) \$5.50, (hands quarter) \$5.75, (hands quarter) and \$6.00.

CUSTOMER: Thank you very much.

CLERK: Thank you, please call again!

MAKING CHANGE

For each of the following situations determine how much change the customer should receive. Also determine the number of pennies, nickels, dimes, quarters, ones, fives and tens that would be given.

1. The sale is for $1.83. The customer gives you 2-$1 bills.

2. The sale is for $2.48. The customer gives you a $10 bill.

3. The sale is for $9.20. The customer gives you 2-$5 bills and 2 dimes.

4. The sale is for $20.15. The customer gives you 2-$20 bills.

5. The sale is for $7.28. The customer gives you a $10 bill and 3 pennies.

KEY - MAKING CHANGE

1. 17 cents in change - 2 pennies
   1 nickel
   1 dime

2. $7.52 is the change - 2 pennies
   2 quarters
   2-$1 bills
   1-$5 bill

3. $1.00 is the change - 1-$1 bill

4. $19.85 is the change - 1 dime
   3 quarters
   4-$1 bills
   1-$5 bill
   1-$10 bill

5. $2.75 is the change - 3 quarters
   2-$1 bills

DO'S AND DON'TS OF MAKING CHANGE

DO

Be courteous

Lay money from customer on cash register

Count back change one piece at a time

Use as few coins as possible

Be accurate in calculating the amount

Thank the customer

DON'T

Put money in drawer until sale is completed

Hand customer the change in one handful

Use more coins than needed

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM III - Why is a correct sales ticket needed by a business?

Study Questions:

1. Why is the sales ticket important?
2. How is the sales ticket used by the business?
3. How do I fill out a sales ticket?
4. What are some common mistakes made when preparing a sales ticket?
5.
6.

References and Materials:

1. BP-III-TM-1, Why Three Copies?
2. BP-III-TM-2, BP-III-INFO-3, What Makes a Good Sales Ticket?
3. BP-III-TM-4, Example of a Good Sales Ticket
4. BP-III-INFO-5, Steps in Completing a Sales Ticket
5. BP-III-ACT-6, BP-III-INFO-7, Filling out a Sales Ticket, KEY
6. BP-III-TM-8, What's Wrong With This Sales Slip?

Interest Approach: Have students bring in sales tickets and discuss the good and bad points of each one. Try to find mistakes and see which ones are most common.

Learning Activities:

1. Discuss why the sales ticket is important to a business. Use BP-III-TM-1 to show how a sales ticket is used and why there are multiple copies.
2. Use BP-III-TM-2 and BP-III-INFO-3 to discuss what goes into a good sales ticket. Use BP-III-TM-4 as an example.
3. Use BP-III-INFO-5 and BP-III-ACT-6 to give students practice in filling out sales tickets.

Conclusion: Use BP-III-TM-8 to summarize. Have students come up and identify problems one at a time, or divide class into groups and see which group can find the most errors.

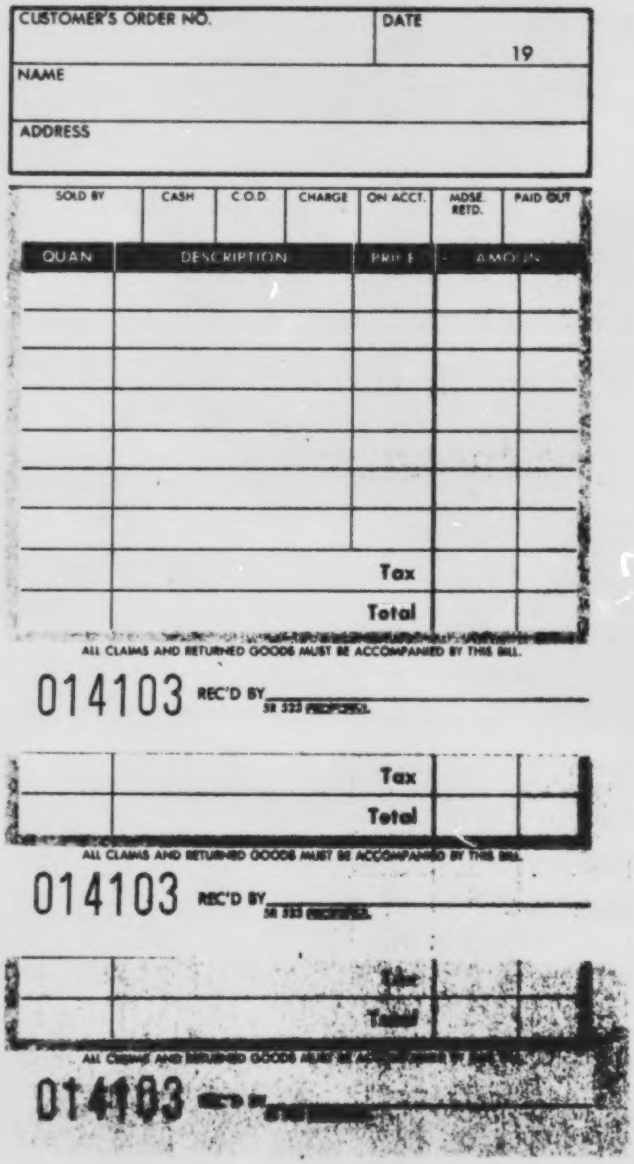
Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of the sales ticket to the business.
2. Explain why there are multiple copies of the sales ticket.
3. Fill out a sales ticket.
4. Explain what makes a good sales ticket.
5. List some common mistakes made on sales tickets.

Optional Learning Activities:

1. Have students role-play taking orders over the phone. Have them fill out an actual ticket.
2. Obtain sales tickets from local agri-businesses for students to use in more practice.

WHY THREE COPIES?



CUSTOMER'S ORDER NO.	DATE 19
NAME	
ADDRESS	

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT

QUAN	DESCRIPTION	PRICE	AMOUNT
	Tax		
	Total		

ALL CLAIMS AND RETURNED GOODS MUST BE ACCOMPANIED BY THIS BILL.

014103 REC'D BY ____________

	Tax		
	Total		

ALL CLAIMS AND RETURNED GOODS MUST BE ACCOMPANIED BY THIS BILL.

014103 REC'D BY ____________

	Tax		
	Total		

ALL CLAIMS AND RETURNED GOODS MUST BE ACCOMPANIED BY THIS BILL.

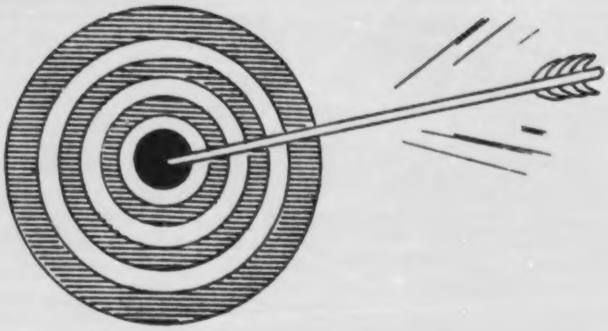
014103 REC'D BY ____________

ONE COPY FOR THE BUSINESS

ONE COPY FOR THE CUSTOMER

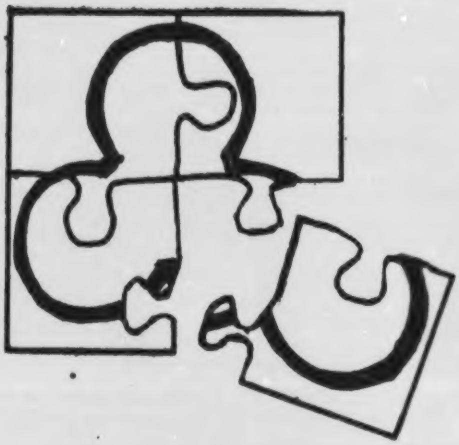
ONE COPY FOR BUSINESS'S CUSTOMER'S FILE

WHAT MAKES A GOOD SALES TICKET?



ACCURACY

COMPLETENESS



NEATNESS

What Makes a Good Sales Ticket?

Discuss the following items with TM-2.

Accuracy

The correct prices, discounts and taxes are used. The math is correct.

Completeness

Everything needed is filled in, all blanks completed.

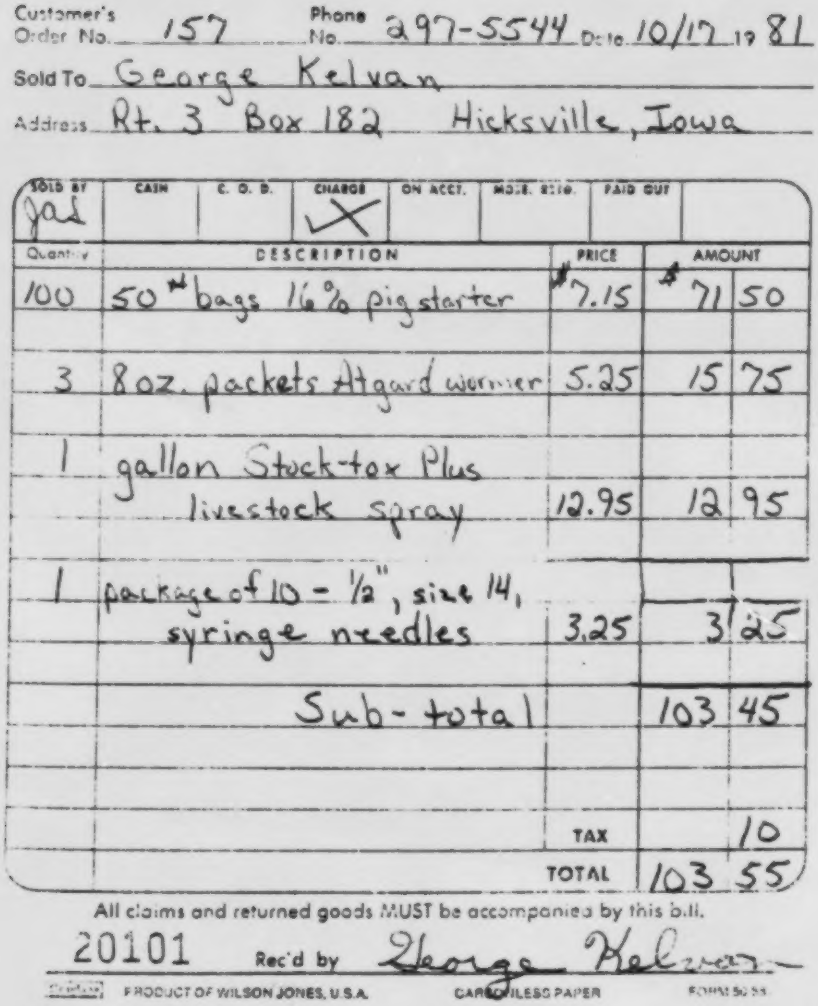
- date
- customer's name, address, phone number
- type of payment
- taxes, discounts
- descriptions of items, price, quantity
- salesperson's initials
- customer signature
- any special instructions

Neatness

Items written on the lines.
Writing is clear and legible.
Columns of numbers aligned.
Numbers are readable.

you can do it

EXAMPLE OF A GOOD SALES TICKET



SALES SLIP

Customer's Order No. 157 Phone No. 297-5544 Date 10/17 19 81

Sold To George Kelvan

Address Rt. 3 Box 182 Hicksville, Iowa

SOLD BY	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT
Jal			✓			

Quantity	DESCRIPTION	PRICE	AMOUNT	
100	50# bags 16% pig starter	$7.15	$ 71	50
3	8 oz. packets Atgard wormer	5.25	15	75
1	gallon Stock-tox Plus livestock spray	12.95	12	95
1	package of 10 - 1/2", size 14, syringe needles	3.25	3	25
	Sub-total		103	45
		TAX		10
		TOTAL	103	55

All claims and returned goods MUST be accompanied by this bill.

20101 Rec'd by George Kelvan

PRODUCT OF WILSON JONES, U.S.A. CARBONLESS PAPER FORM 50 55

STEPS IN COMPLETING A SALES TICKET

1. Enter the correct date.
2. Write the customer's correct name and address in the proper space.
3. Give a complete description of each item sold. Include quantity and type of merchandise.
4. Write down the price/unit and then calculate the total amount and enter it in the correct column.
5. Deduct any discounts that may apply.
6. Add any service charges (e.g., delivery or grinding charges).
7. Make sub-total.
8. Calculate and enter sales tax.
9. Figure the grand total.
10. Indicate the method of payment.
11. If payment is by check for other than amount of sale, indicate it on the ticket.
12. Initial the ticket.
13. Have the customer sign the ticket.
14. Give customer their copy of the ticket.
15. File other copies in appropriate places.

Source: Business Procedures in Agricultural Occupations, 1967 Workshop in Agricultural Education, Iowa State University, Ames, Iowa.

Filling Out a Sales Ticket

You are a counter person in a feed store and Bob Jones comes in to order some feed. Bob's address is Rt. #1, Clyde, Iowa and his phone number is 683-3992. The order number is 273. It is a charge sale. Bob wants the following items:

1. 50 - 50# sacks of sow cubes priced at $12.15/cwt.
2. 10 - 50# sacks of 18% pig starter @ $18.00/cwt.
3. 2 - livestock marking chalks @ 35¢ each.
4. 1 - 100 dose bottle of OrIron @ $5.75 each.
5. 1 - 250 ml. bottle pen-strep antibiotic @ $10.50 each.

Complete the sales ticket for this sale.

SALES SLIP

Customer's Order No.______________ Phone No.______________ Date__________19____

Sold To______________________________

Address______________________________

SOLD BY	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	

Quantity	DESCRIPTION	PRICE	AMOUNT	
		TAX		
		TOTAL		

All claims and returned goods MUST be accompanied by this bill.

20101 Rec'd by

PRODUCT OF WILSON JONES, U.S.A CARBONLESS PAPER FORM [illegible]

KEY - Filling Out a Sales Ticket

SALES SLIP

Customer's Order No. 273 Phone No. 683-3992 Date (use current date) 19

Sold To Bob Jones

Address Rt. 1 Clyde, Iowa

SOLD BY	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	
students initials			✓				

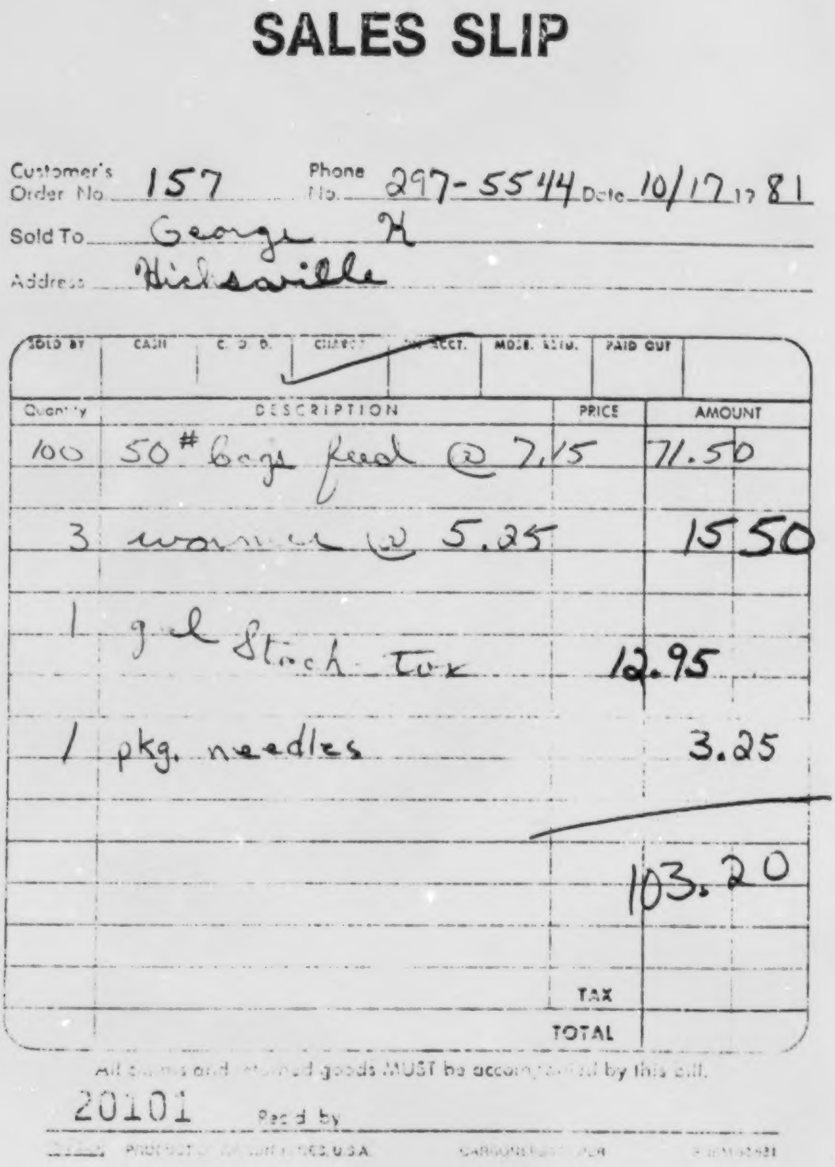
Quantity	DESCRIPTION	PRICE	AMOUNT	
50	50# bags sow cubes	$12.15/cwt	303	75
10	50# bags 18% pig starter	$18/cwt	90	00
2	livestock marking chalks	.35		70
1	100 dose bottle Or Iron	5.75	5	75
1	250 ml bottle pen-strep	10.50	10	50
	sub-total		480	00
		TAX		02
		TOTAL	480	02

All claims and returned goods MUST be accompanied by this bill.

20101 Rec'd by (signature)

PRODUCT OF WILSON JONES, U.S.A. CARBONLESS PAPER FORM [illegible]

WHAT'S WRONG WITH THIS SALES SLIP?



SALES SLIP

Customer's Order No. 157 Phone No. 297-5544 Date 10/17 19 81

Sold To George K

Address Hicksville

SOLD BY	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT
			✓			

Quantity	DESCRIPTION	PRICE	AMOUNT
100	50# bags feed @ 7.15		71.50
3	wormer @ 5.25		15.50
1	gal Stock tox		12.95
1	pkg. needles		3.25
			103.20
		TAX	
		TOTAL	

All claims and returned goods MUST be accompanied by this bill.

20101 Rec'd by

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM IV - How do I apply discounts and sales tax to sales?

Study Questions:

1. What is a sales tax?
2. Are some items exempt from sales tax?
3. How is sales tax calculated?
4. What are some types of discounts?
5. How are discounts calculated?
6. Why do agribusinesses use discounts?

References and Materials:

1. Iowa Sales and Use Tax Information Booklet, July, 1980.
2.
3.
4.

Instructional Materials:

1.	BP-IV-INFO-1	Ag Sales Tax Exemptions
2.	BP-IV-INFO-2	Calculating Sales Tax
3.	BP-IV-TM-3	Types of Discounts
4.	BP-IV-INFO-4	Types of Discounts
5.	BP-IV-INFO-5	Calculating Discounts
6.	BP-IV-ACT-6	Applying Sales Tax and Discounts
7.	BP-IV-INFO-7	Key for Applying Sales Tax and Discounts

Interest Approach: Have students list taxes and discounts that apply to agricultural sales.

Learning Activities:

1. Use BP-IV-INFO-1 and BP-IV-INFO-2 to discuss sales tax exemptions and how sales tax is calculated.

2. Use BP-IV-TM-3 and BP-IV-INFO-4 to discuss the different types of discounts.
3. Use BP-IV-INFO-5 as an example of how to calculate discounts.
4. Use BP-IV-ACT-6 to give students practice in filling out a sales tax. (Use BP-III-ACT-6 as a sales slip or obtain some from a local business.)

Conclusion: Summarize by reviewing how discounts and taxes are applied to the sales ticket.

Evaluation Criteria: As a result of this lesson, students should be able to:

1. Describe how sales tax is applied.
2. Calculate the sales tax on a sale.
3. List and describe different types of discounts.
4. Calculate discounts.
5. Explain why agribusinesses use discounts.
6.

Optional Learning Activities:

1. Have a feed or fertilizer dealer come in and explain any discounts they offer.

AG SALES TAX EXEMPTIONS

1. Commercial fertilizer
2. Agricultural Lime
3. Materials used for disease, weed, and insect control or health promotion of plants or livestock produced for market. (Does not include tools and equipment used.)
4. Fuel used for grain drying or in tractors.
5. Foods (as may be purchased with USDA food coupons.)
6. Draft horses if used as a source of power.
7. Anything used directly to further produce something.
   For example: A farmer buys feed to finish out a hog which is sold to a packing plant which in turn sells the hide to a football manufacturer which makes a football to sell to a sporting goods store which in turn sells it to a 12-year old. The only sales tax applies to the final sale of the football. The feed, hog, and hide are exempt because they undergo further "manufacturing."

Examples

Non-taxable	Taxable
Atrazine	Sprayer
Penicillin	Syringe
Feed	Feeders, waterers

SOURCE: Iowa Sales and Use Tax Information Booklet, July 1980.

CALCULATING SALES TAX

The following sales tax schedule is used for calculating sales tax:

Sales Tax Schedule

$0.00	-	$0.14	=	$0.00	$2.75	-	$3.14	=	$0.09
0.15	-	0.44	=	0.01	3.15	-	3.44	=	0.10
0.45	-	0.74	=	0.02	3.45	-	3.74	=	0.11
0.75	-	1.14	=	0.04	3.75	-	4.14	=	0.12
1.15	-	1.44	=	0.04	4.15	-	4.44	=	0.13
1.45	-	1.74	=	0.05	4.45	-	4.74	=	0.14
1.75	-	2.14	=	0.06	4.75	-	5.14	=	0.15
2.15	-	2.44	=	0.07	5.15	-	5.44	=	0.16
2.45	-	2.74	=	0.08	5.45	-	5.74	=	0.17

In purchases of larger amounts than $5.74, the tax will be computed at straight three per cent, one half cent or more being treated as one cent.

Examples

A sale of $5.80 has a sales tax of $.174 or 17¢, while a sale of $5.84 has a sales tax of $.1752 which is rounded to 18¢

For larger amounts just multiply by 3%.

$174.50 purchase
x .03
5.1750 or $5.18 sales tax

TYPES OF DISCOUNTS

EARLY SEASON

CASH

BULK

TONNAGE or QUANTITY

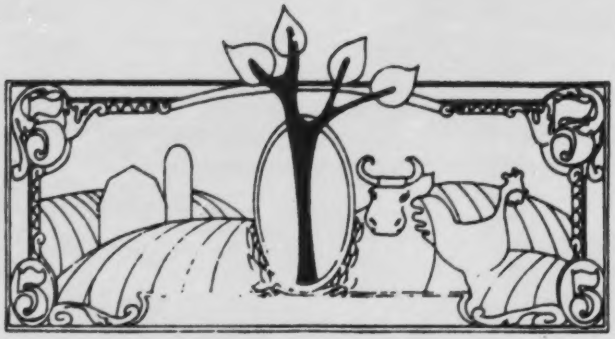
TYPES OF DISCOUNTS

Cash	- given for paying cash rather than charging the sale
Tonnage/Quantity	- given for buying large amounts of one item, for example, fertilizer, chemicals.
Early Season	- given for buying in advance of the time the product is needed. Example - buying seed corn in December or January.
Bulk	- given for buying items in a loose form rather than in bags, usually applies to feed sales.

CALCULATING DISCOUNTS

Mr. Smith goes to his feed store and orders 6 tons of bulk 16% Pig Grower. The feed costs $180/ton. The feed store gives a 1% cash discount, a $3/ton discount for quantities over three tons, and the feed company has a $2/ton discount for buying in bulk. How much will the feed cost Mr. Smith if he pays with a check when he orders the feed?

6 tons x $180/ton =	$1,080.00	
less bulk discount $2/ton x 6 tons	- 12.00	
	1,068.00	
less quantity discount $3/ton x 6 tons	- 18.00	
	1,050.00	
less 1% cash discount	- 10.50	
	$1,039.50	final cost



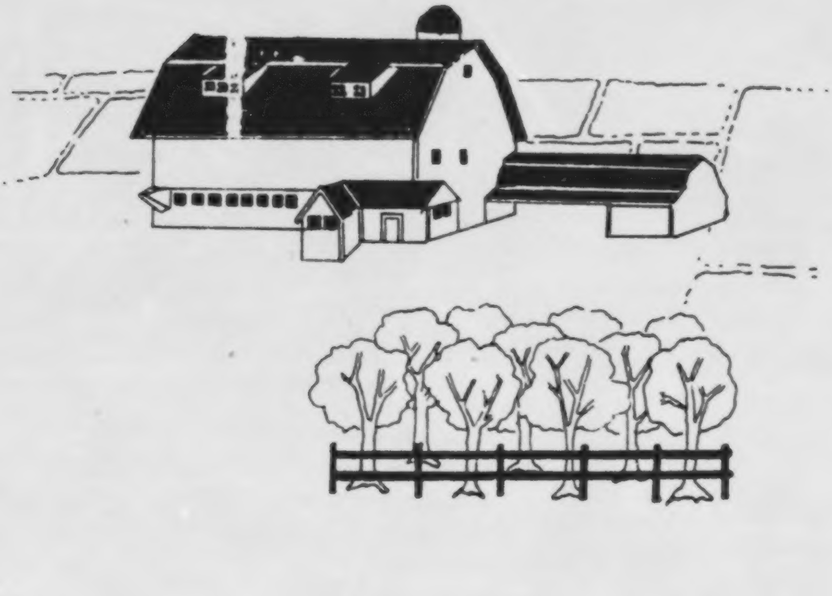
APPLYING SALES TAX AND DISCOUNTS

Complete a sales ticket from the following information.

Mr. George Jones buys the following from his local co-op on January 11. His address is Route 1, Alvord, Iowa and phone number is 492-4247. The order number is 18 and Mr. Jones wrote a check.

50 bushels of COOP 475 seed beans @ $14.25/bu.
20 bushels of COOP SX444 seed corn @ $62.50/bu.
30 fifty lb. bags of cattle supplement @ $240/ton
2 sixteen feet cattle panels @ $13.99 each

The coop gives a 1% cash discount. Seed beans purchased before January 1 receive a $.50/bu. discount and before February 1 a $.25/bu. discount. Seed corn purchased before January 15 receives a $5.00/bu. discount and before February 1 a $2.50/bu. discount. There is a quantity discount for feed of $.10/cwt. for amounts over 2000 lbs.



KEY FOR APPLYING SALES TAX AND DISCOUNTS

SALES SLIP

Customer's Order No. 18 Phone No. 492-4241 Date Jan. 11 19 ___

Sold To George Jones

Address Rt. 1 Alvord, Iowa

SOLD BY students initials	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	
	X						

Quantity	DESCRIPTION	PRICE	AMOUNT	
50	bu. COOP 175 seed beans	14.25	712	50
	less early season discount	.25/bu	- 12	50
			700	00
20	bu. COOP SX444 seed corn	62.50	1250	00
	less early season discount	5/bu	-100	00
			1150	00
30	50# bags cattle supplement	$240/T	180	00
2	16' cattle panels	13.99	27	98
	Sub total		2057	98
	less cash discount 1%		20	58
			2037	40
		TAX		84
		TOTAL	2038	24

All claims and returned goods MUST be accompanied by this bill.

20101 Rec'd by (signature)

CARBONLESS PAPER FORM 50 581

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM V - How are cash registers used in transactions and in checking daily cash balance?

Study Questions:

1. What is the function of the cash register?
2. How is the cash register used by agribusiness?
3. Why is the daily cash balance important?
4. How is the daily cash balance checked?
5.

References:

1.

2.

3.

Instructional Materials:

1. BP-V-TM-1, Functions of the Cash Register
2. BP-V-TM-2, Using the Cash Register
3. BP-V-TM-3, The Cash Register Drawer
4. BP-V-TM-4, Checking Daily Cash Balance

Interest Approach: Discuss the many different types of cash registers students have had experience with or seen in stores.

Learning Activities:

1. Use BP-V-TM-1 to discuss what cash registers can do.
2. Use BP-V-TM-2 to discuss the procedure for using a cash register. This would be a good time for a field trip to see how a cash register is actually used. Use BP-V-TM-3 to show students how money is arranged in the drawer.
3. Discuss the importance of checking the daily cash balance and use BP-V-TM-4 to show how to check it.

Conclusion: Summarize by re-emphasizing the importance of the cash register in the agribusiness.

Evaluation: As a result of this lesson, students should be able to:

1. Explain how the cash register is used by agribusinesses.
2. Check the daily cash balance.
3. Explain why the daily cash balance is important.
4. Tell how money is arranged in drawer.

FUNCTIONS OF THE CASH REGISTER

HOLD MONEY FROM SALES

TOTALING OF SALES

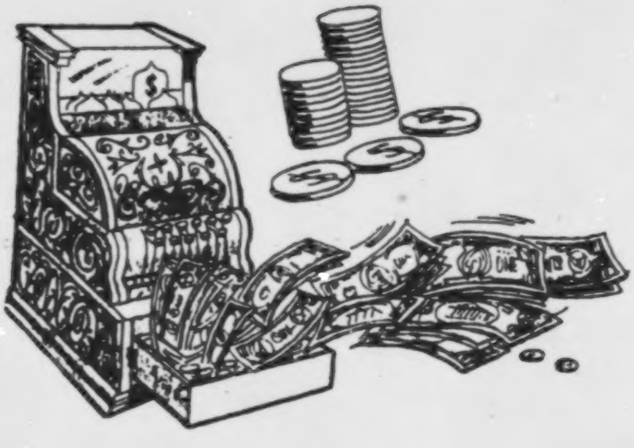
PROVIDE PERMANENT RECORD OF TRANSACTIONS

NEW TYPES: AID INVENTORY CONTROL

CALCULATE CHANGE

AUTOMATIC PRICING

CHECK CLEARING



USING THE CASH REGISTER

1. FILL OUT THE SALES TICKET
2. RING THE SALE ON THE CASH REGISTER
3. ACCEPT MONEY FROM CUSTOMER
4. LAY MONEY ON THE CASH REGISTER
5. MAKE THE CORRECT CHANGE
6. GIVE CUSTOMER THE RECEIPT
7. PUT MONEY IN DRAWER
8. CLOSE DRAWER

THE CASH REGISTER DRAWER

CHECKS & LARGE BILLS	TWENTIES	TENS	FIVES	ONES
OTHER COINS	QUARTERS	DIMES	NICKELS	PENNIES

BP-V

153

TM-3

CHECKING DAILY CASH BALANCE

BEGINNING CASH REGISTER BALANCE

PLUS

CASH SALES

LESS

CASH REFUNDS

LESS

SMALL PURCHASES

EQUALS

ENDING CASH REGISTER BALANCE

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM VI - How are checks and charge cards handled?

Study Questions:

1. How do I fill-out a check?
2. What things should I look for before accepting a check as payment?
3. How do I check the monthly statement?
4. Why is credit used by businesses?
5. What is the procedure for processing purchases made with charge cards?
6.

References:

1. Teaching Source Units for Cooperative Occupational Education Related Class. Department of Vocational and Technical Education, University of Illinois, July, 1974.
2.
3.

Instructional Materials:

1. BP-VI-INFO-1, Making Out a Check
2. BP-VI-TM-2, Example of a Good Check
3. BP-VI-ACT-3, Blank Checks
4. BP-VI-TM-4, Ask These Questions When Accepting a Check
5. BP-VI-TM-5, Would You Accept This Check?
6. BP-VI-INFO-6, Balancing the Monthly Statement
7. BP-VI-TM-7, Why Do Businesses Use Credit?
8. BP-VI-INFO-8, Processing Charge Card Sales

Interest Approach: Ask the students how many have checking accounts and why they have them.

Learning Activities:

1. Use BP-VI-INFO-1 to tell students how to make out a check. Use BP-VI-TM-2 to show another example of a good check. Use BP-VI-ACT-3 or blank checks from a local bank to give students practice in writing checks. Write on chalkboard or give oral instructions on what you want on the check.
2. Use BP-VI-TM-4 and BP-VI-TM-5 to discuss what to look for when accepting a check as payment. Additionally, the teacher could write several checks with mistakes and pass them around the room and have students write down what was wrong with each check.
3. Use BP-VI-INFO-6 to explain to students how to balance a checkbook with the monthly statement. Do an example on the blackboard or overhead.
4. Use BP-VI-TM-7 to discuss why credit is important to businesses.
5. Use BP-VI-INFO-8 and a credit card machine borrowed from a local business to demonstrate how to process a charge card sale. Let students practice with machine if class size and time allows.

Conclusion: Draw a big check on the chalkboard and have students come up and fill in one part at a time. Other students can watch for mistakes.

Evaluation: As a result of this lesson, students should be able to:

1. Fill out a check correctly.
2. Determine if a check is valid for payment.
3. Balance the checking account with the monthly statement.
4. Explain the procedure for processing a credit card purchase.
5. Explain why businesses use credit.

Optional Learning Activities:

1. Use a bank teller as a resource person.
2. Take a field trip to a local bank.

Making Out a Check

1. Use ink.

2. Fill in the date.

3. Fill in the payee.

4. Write in dollar amount in figures.

5. Write out the dollar mount in words.

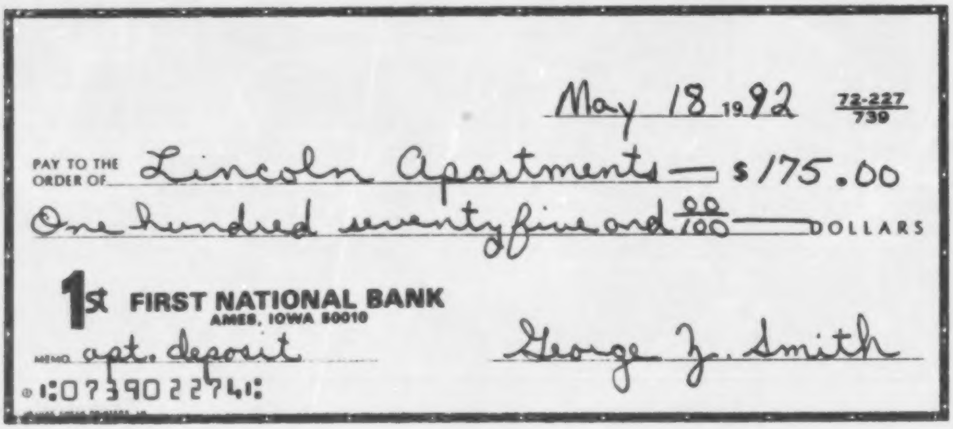
6. Draw lines after the payee and written-out dollar amount so that nothing may be added to these blanks.

7. Write down on check what it was for.

8. Record the check number, date, payee and amount in the check register.

9. Sign the check.

EXAMPLE:



May 18 1992 $\frac{72\text{-}227}{739}$

PAY TO THE ORDER OF Lincoln Apartments — $ 175.00

One hundred seventy five and $\frac{00}{100}$ — DOLLARS

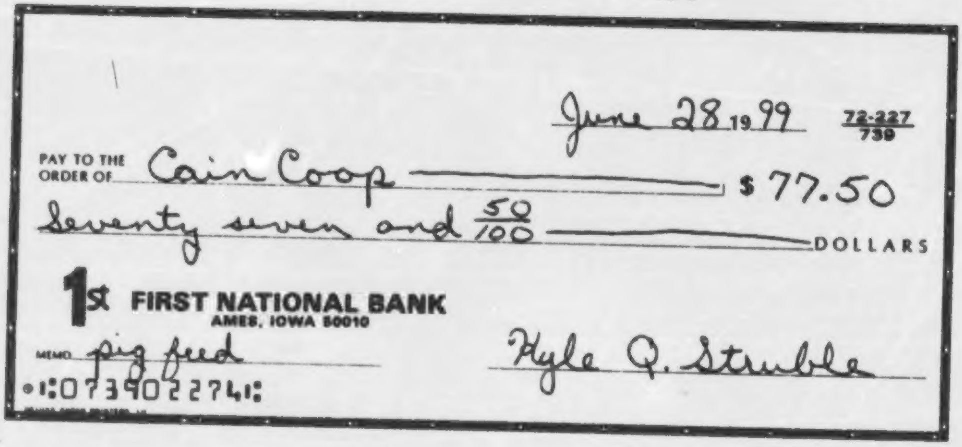
1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO apt. deposit

George Z. Smith

⑆073902274⑆

EXAMPLE OF A GOOD CHECK



June 28 19 99 72-227/739

PAY TO THE ORDER OF Cain Coop $ 77.50

Seventy seven and 50/100 DOLLARS

1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO pig feed

Kyle Q. Struble

⑆073902274⑆

_______________19______ 72-227/730

PAY TO THE ORDER OF _______________________________ $

____ DOLLARS

1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO ____________________ ____________________

⑆073902274⑆

_______________19______ 72-227/730

PAY TO THE ORDER OF _______________________________ $

____ DOLLARS

1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO ____________________ ____________________

⑆073902274⑆

_______________19______ 72-227/730

PAY TO THE ORDER OF _______________________________ $

____ DOLLARS

1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO ____________________ ____________________

⑆073902274⑆

ASK THESE QUESTIONS WHEN ACCEPTING A CHECK

Is the DATE correct ?

Is it written in INK ?

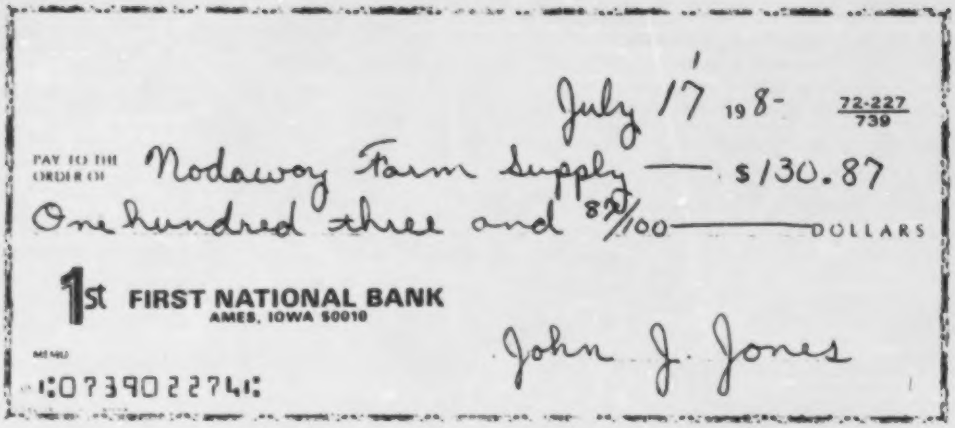
Is the PAYEE correct ?

Are both AMOUNTS correct ?

Is it SIGNED ?

May I see some IDENTIFICATION ?

Would you accept this check ?



July 17 19 8-
72-227/739

PAY TO THE ORDER OF Nodaway Farm Supply —— $130.87

One hundred three and 87/100 ——— DOLLARS

1st FIRST NATIONAL BANK
AMES, IOWA 50010

MEMO

⑆073902274⑆

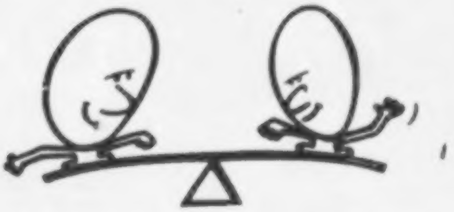
John J. Jones

Balancing the Monthly Statement

I. a) Start with statement balance
   b) Add deposits made but not credited to account
   c) Subtract checks outstanding (written but not cleared thru bank)
   d) BALANCE

II. a) Start with checkbook balance
   b) Add any interest earned
   c) Subtract any bank service charges
   d) CHECKBOOK BALANCE

I.d) and II.d) should be equal.



If they are not:

1. Compare cancelled checks to the statement.
2. Compare deposit receipts to your checkbook and statement.
3. Sort cancelled checks by check number or date issued and compare them to your checkbook.
4. Check all additions and subtractions in your checkbook.
5. Be sure that all bank charges have been deducted from your checkbook.
6. Be sure that any interest earned has been added to your checkbook.

If it still does not balance, consult the bank.

WHY DO BUSINESSES USE CREDIT

Helps to make regular customers.

Customers become less price conscious.

More convenient for customers.

Builds customer confidence in the business.

Processing Charge Card Sales

Fill out sales ticket.

Transfer amount of sale to credit card receipt.

Check credit card number against list of bad credit cards.

Use machine to process slip with credit card.

Have customer sign receipt.

Check signature on receipt against signature on back of credit card.

Return credit card and copy of receipt to the customer.

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM VII - How are computers, calculators, and other business machines utilized by an agribusiness?

Study Questions:

1. What are some types of business machines?
2. What is a computer?
3. What can a computer do?
4. What are the parts of a computer?
5.
6.

Reference and Materials:

1. BP-VII-TM-1, Business Machines
2. BP-VII-TM-2, Sections of a Computer

Interest Approach: Have students list all the businesses or persons in town who have microcomputers.

Learning Activities:

1. Use BP-VII-TM-1 to discuss the different types of business machines and their uses.
2. Lead a discussion on what a computer is and how they can help agribusinesses. Use BP-VII-TM-2 to show the sections of a computer.
3.
4.

Conclusion: Summarize by emphasizing how important the computer is becoming to agribusinesses and quickly review the basics of the computer.

Evaluation: As a result of this lesson, students should be able to:

1. Explain why adding machines and calculators are important to businesses.

2. List the three main parts of the computer.
3. Discuss what a computer can do.
4.
5.
6.

Optional Learning Activities:

1. Give students practice in operating adding machines by cooperating with business teacher.
2. Use a resource person to demonstrate a microcomputer and explain what they can do.

BUSINESS MACHINES

adding machines

cash registers

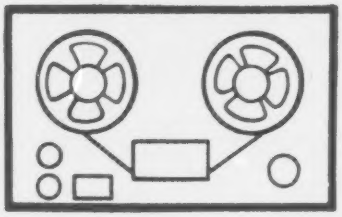
typewriters

tape recorders

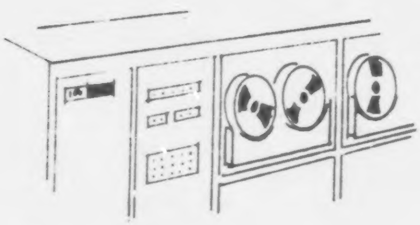
microcomputers

electronic calculators

copiers



dictaphones



SECTIONS OF A COMPUTER

INPUT & OUTPUT

MEMORY

CENTRAL PROCESSING UNIT

UNIT: BUSINESS RECORDS AND PROCEDURES

PROBLEM VIII - How do businesses determine the price for merchandise to be sold?

Study Questions:

1. What things influence wholesale and retail prices?
2. What are overhead costs?
3. What are merchandising costs?
4. What is markup?
5. What is markdown?
6.

References and Materials:

1. Business Procedures in Agricultural Occupations, Department of Agricultural Education, Iowa State University
2.
3.
4.

Instructional Materials:

1. BP-VIII-TM-1, What Things Affect Prices?
2. BP-VIII-TM-2, Types of Costs.
3. BP-VIII-INFO-3, Overhead Costs.
4. BP-VIII-TM-4, Merchandising Costs.
5. BP-VIII-TM-5, Calculating Markup.
6. BP-VIII-TM-6, Markup Varies Because Of:
7. BP-VIII-TM-7, Why Markdown?
8. BP-VIII-TM-8, Calculating Markdown.
9. BP-VIII-ACT-9, BP-VIII-INFO-10, Markup and Markdown Worksheet, Key

Interest Approach: Have the class take an item and tell what price they would set on it if they were a business manager.

Learning Activities:

1. Use BP-VIII-TM-1 and BP-VIII-TM-2 to discuss what affects prices and the different types of costs.

2. Break the class into small groups and have them list as many overhead costs as they can. Use BP-VIII-INFO-3 as a source to compare their lists to.
3. Use BP-VIII-TM-3 to discuss merchandising costs. Compare and contrast merchandising and overhead costs.
4. Use BP-VIII-TM-5 and BP-VIII-TM-6 to discuss markup.
5. Use BP-VIII-TM-7 and BP-VIII-TM-8 to discuss markdown.
6. Use BP-VIII-ACT-9 to give students practice in calculating markup and markdown.

Conclusion: Take a SOE project and apply business pricing ideas to it to help students get a clearer understanding.

Evaluation Criteria: As a result of this lesson, students should be able to:

1. List factors that affect retail and wholesale prices.
2. Explain the difference between fixed and variable costs.
3. List some types of overhead costs.
4. List some types of merchandise costs.
5. Explain the difference between overhead and merchandising costs.
6. Calculate markup.
7. Explain factors that go into determining markup.
8. Calculate markdown.
9. List factors that cause business to mark down prices.

Optional Learning Activities:

1. Take a field trip to an agribusiness and ask the owner/manager to explain their pricing method.
2.

WHAT THINGS AFFECT PRICES?

SUPPLY AND DEMAND

COMPETITION

VALUE OF GOODS DUE TO TIME, PLACE, FORM

AGRICULTURAL PRODUCTION-PRICE CYCLES

PERISHABLE CHARACTERISTICS OF AG PRODUCTS

BUYER PSCHOLOGY: low price means low quality

underpricing

odd prices - $9.95

multiple unit pricing -

3 for $1

VOLUME OF BUSINESS

TYPES OF COSTS

FIXED - COSTS THAT STAY ABOUT THE SAME OR LONG TERM COSTS THAT CAN BE ACCURATELY PREDICTED

EXAMPLES - insurance, interest, taxes, depreciation, etc.

VARIABLE - COSTS THAT CHANGE WITH TIME, VOLUME OF BUSINESS, ETC.

EXAMPLES - product to be sold, containers, labor, transportation, etc.

OVERHEAD COSTS

WAGES AND SALARIES

RENT

TAXES

INTEREST

INSURANCE

SUPPLIES

SERVICES PURCHASED

BAD DEBTS

TRAVEL

COMMUNICATIONS

REPAIRS

DEPRECIATION

PROFESSIONAL SERVICES

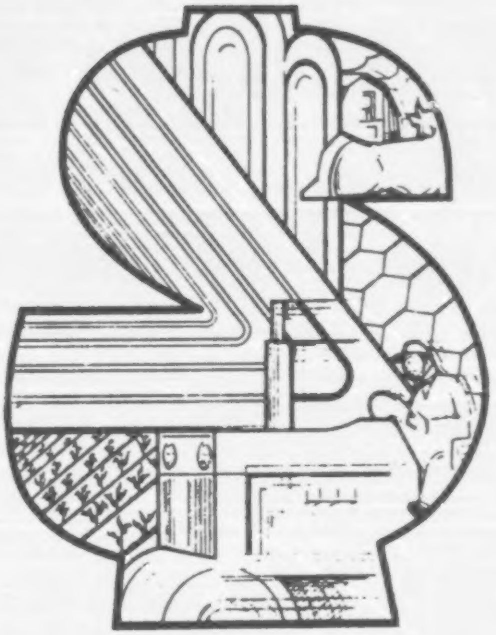
THEFT AND LOSS

OBSOLETE PRODUCTS

OVERSTOCK OF ITEMS

STORAGE

ACCOUNTING



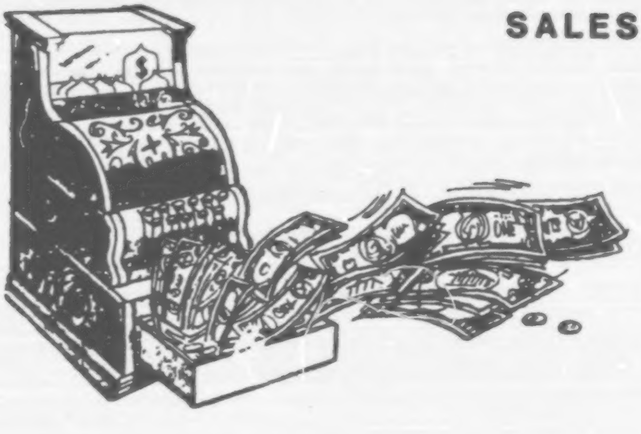
MERCHANDISING COSTS

ADVERTISING

DISPLAYING MERCHANDISE

SALES COMMISSIONS

SALES PEOPLE



CALCULATING MARKUP

DEFINITION - The amount added to the cost to make the selling price.

$$\frac{\$\ \text{markup}}{\$\ \text{cost}} = \%\ \text{markup}$$

EXAMPLE:

Retail price = $13

Cost = $10

$3 markup

$$\frac{\$3\ \text{markup}}{\$10\ \text{cost}} = 30\%\ \text{markup}$$

MARKUP VARIES BECAUSE OF:

turnover rates

competition

legal regulations

controls by suppliers

customary prices

sales promotions

customer's concept of value

theft or loss

WHY MARKDOWN?

Changes in wholesale prices
Changes in competition

Quantity purchases

Promote other items in the store

Style Changes

Handling and storage damage

Poor judgment in first pricing

Poor advertising and promotion by salesmen

Overstocked

Poor color, sizes, quality, etc.

CALCULATING MARKDOWN

DEFINITION - The reduction in retail price of a piece of merchandise.

$$\% \text{ markdown} = \frac{\$ \text{ markdown}}{\$ \text{ sale price}}$$

$$\text{New Price} = \frac{\text{Old price}}{100\% + \% \text{ markdown}}$$

EXAMPLES:

$$\frac{\$4 \text{ markdown}}{\$16 \text{ sale price}} = 25\% \text{ markdown}$$

$$\frac{\$20 \text{ old price}}{100\% + 25\%} = \$16 \text{ new price}$$

MARKUP AND MARKDOWN WORKSHEET

1. Figure the selling price on the following items. Use the markup on cost system and figure the cost price as the wholesale price plus freight.

   a. A 20 ton car of feed @ $89.00 per ton with freight at $3.00 per ton and a 12% markup. ____________/ton.

   b. 25 bu. alfalfa seed @ $23.00 per bu., no freight. Markup at 15% on cost. ____________/bu.

   c. 50 - 1 gallon cans of oil. Total invoice charge was $110.00 plus $10 freight. Markup at 33-1/3% of cost. ____________/gal.

2\.

Cost per ton	$ Markup	% Markup on Cost
$50	$10	
$70	$10	
$90	$10	

3. An item that sells for $2.50 has been overstocked and the manager decides to reduce the selling price of this item by 10% to try to move this product. What is the new selling price after the 10% reduction?

4. A ton of feed plus the freight charges cost a dealer $80.00 He plans to use a 20% markup on cost. What is the selling price per ton of this feed?

5. Rats damaged some bagged feed that normally sells for $12.50/bag. The feed dealer decides to discount these bags $2.50 each. What is the percent markdown?

Key for Markup and Markdown Worksheet

1. a) $\frac{\$\text{ markup}}{\$92\text{ cost}} = 12\%$ so markup = \$11.04

   selling price = \$103.04/ton

   b) $\frac{\$\text{ markup}}{\$23\text{ cost}} = 15\%$ so markup = \$3.45

   selling price = \$26.45

   c) $\frac{\$\text{ markup}}{\$120\text{ cost}} = 33\text{-}1/3\%$ so markup = \$40.00

   \$160 total selling price = \$3.20/gallon

2. 20%

   14.29%

   11.11%

3. New price = $\frac{\$2.50}{100\% + 10\%} = \$2.27$

4. \$96/ton

5. $\frac{\$2.50}{\$12.50} = 20\%$

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES (OB)

Problem Areas Included:

OB-I. What do I need to know about the vocabulary of business?

OB-II. Where would I fit into the business organization?

OB-III. What do I need to know about the operating expenses of an agricultural business?

OB-IV. What are the sources of the money an agricultural business needs to meet operating expenses?

OB-V. How do businesses manage to have the right amount of each product available at the time when the customers want them?

OB-VI. What happens if a customer wants to pay later for supplies needed now?

OB-VII. What role do filing systems play in the operation of an agricultural business?

OB-VIII. How does a businessperson advertise to perspective customers what agricultural supplies and services the company has to offer?

OB-IX. What do I need to know about displaying agricultural merchandise in the store?

OB-X. What do I need to know about how a business manager keeps track of all the money coming into and going out of the business?

OB-XI. How can I utilize my time on the job most efficiently and productively?

References used in this unit:

1. Business Procedures in Agricultural Occupations. 1967. Department of Agricultural Education, Iowa State University, Ames, Iowa 50011.

2. Cooperative Vocational Education. 1972. State Department of Vocational and Technical Education, Stillwater, Oklahoma.

3. Dictionary of accounting terms. c1970. Southwestern Publishing Company, Cincinnati, Ohio.

4. Gibson, Terry and Trisha Day. 1976. Appeals. University of Wisconsin Extension Service, Madison, Wisconsin.

5. Long, Don L., J. Dale Oliver and Charles W. Coale. 1979. Introduction to Agribusiness Management. McGraw-Hill Book Company, New York.

6. McGuire, James E. 1979. Advertising and Display in Agribusinesses. McGraw-Hill Book Company, New York.

7. Organizations and Functions of Agricultural Businesses. 1965. Center for Research and Leadership Development in Vocational and Technical Education, The Ohio State University, Columbus, Ohio.

8. Teaching Source Units for Cooperative Occupational Education Related Class. 1974. Department of Vocational and Technical Education, University of Illinois, Urbana-Champaign, Illinois.

9. Williams, David L. ed. 1970. Handling Products and Personnel in Agricultural Firms. Agricultural Education Division, Vocational and Technical Education Department, University of Illinois, Urbana-Champaign, Illinois

10. Wolf, Willard H., Plank, Harry, et al. 1976. Agricultural Business Supply and Service. Ohio Agricultural Education Curriculum Materials Service, Columbus, Ohio.

11. Jordan and Voegeli. 1972. An Activity-based Curriculum for Occupational Orientation. Alton, Illinois.

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM I - What do I need to know about the vocabulary of business?

Study Questions:

1. Why is it important to know business terminology?
2. What does "knowing business terminology" involve?
3. How can I expand my business vocabulary?
4.
5.

Reference Materials:

1. Long, Don L., J. Dale Oliver and Charles W. Coale. 1979. Introduction to Agribusiness Management. McGraw-Hill Book Company, New York.
2. Dictionary of accounting terms, c1971. Southwestern Publishing Company, Cincinnati, Ohio.

Interest Approach: Ask students if they know the story of the Tower of Babel. Read the short description of the legend (INFO-1) with the students, or have students recount the story.

Learning Activities:

1. Act out the skit, Computer Babel (ACT-2). The script may be given to the players in advance to allow them some preparation time.
2. Divide the class into small groups and discuss the importance of terminology using the question sheet (INFO-1) as a guide.
3. View the transparency (TM-3) summarizing the importance of terminology and what "knowing terminology" involves.
4. View TM-4, and work through the activities which will introduce the vocabulary for Problem Area II (ACT-5, ACT-6, ACT-7 and ACT-8).

The activities correspond as follows to the TM-4:

1. Put the words in prominent places - ACT-5 - have student place the words around the classroom, give each student a sheet to take home.

2. Practice writing - ACT-6
3. Concentrate on only a few - explain to students that new words and terms will be introduced with each problem area.
4. Associate the terms with key words
5. Work together ACT-7
6. Practice using in sentences ACT-8

Conclusion: Summarize the problem solution by having students list on the blackboard reasons why knowing terminology is important, what knowing terminology involves, and ways in which new vocabulary words can be learned.

Evaluation Criteria: Evaluate the outcomes of instruction in this problem area by observing each student's ability to:
(NOTE: This evaluation will be on-going throughout the unit.)

1. Define and interpret words and terms used in business which are introduced within a given problem area.

2. Spell these terms and words correctly.

3. Use these words and terms correctly in sentences.

Optional Learning Activities:

1. Students develop crossword puzzles using business terms and their definitions.

2. Students construct a bulletin board featuring the new words and terms for each problem area as they are introduced.

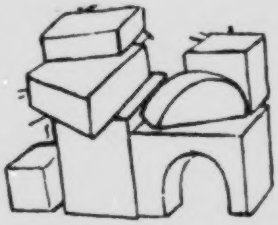
3. Conduct "spelling bees" and "definition bees" throughout the unit.

4. Have students find the new terms and words in the business section of the newspaper or a news magazine such as Time or Newsweek or an agricultural magazine such as Wallaces Farmer or Farm Journal.

The Tower of Babel

(Preface to the skit, "Computer Babel")

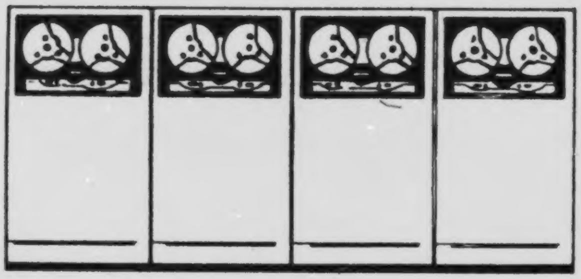
Legend has it that a grand tower was being built in the city of Babel, but the tower never got very far off the ground. Everyone working on the project spoke a different language, so the workers could not follow directions, the architects could not understand the workers' questions, and the workers could not coordinate their tasks.



(Skit - see OB-I, ACT-2)

Discussion Questions to Accompany Computer Babel

1. What is the main problem in the meeting between the swine producer and the computer programmer?
2. Does the swine producer have confidence in the programmer?
3. What do the swine producer and the programmer think of each other?
4. Do you think that the computer programmer would be able to make the computer do what the swine producer wants it to do?
5. How does this scene compare to the legend of the Tower of Babel?



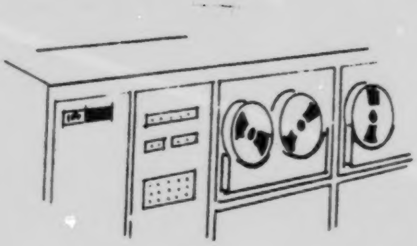
COMPUTER BABEL

(A Skit)

Players: Narrator, Computer salesperson, Swine producer, and Computer programmer

Props: Name cards for all players, desk, chairs, notebook and pen for programmer, coffee cups

Scene: Office of Computer programmer; Computer salesperson has brought the swine producer to the office to discuss the programs he/she would like for the newly purchased computer.



NARRATOR (N): A swine producer, (student's name), has just purchased a microcomputer from this salesperson, (student's name). The swine producer has come into the office to order some programs to be written for his/her swine production operation by the computer programmer, (student's name). Unfortunately, the swine producer knows nothing of computer terminology and the programmer knows nothing of swine production terminology. Let's see what is happening at their first meeting ...

COMPUTER SALESPERSON (CS): (Introduces the swine producer and the programmer.) I'll go and get some coffee, why don't you two go ahead and get started? (leaves to get coffee)

COMPUTER PROGRAMMER (CP): (sitting at desk with notebook) Well, I'll need to know some things about your computer before I begin. First, how many bytes does it have?

SWINE PRODUCER (SP): Bites!? I don't know anything about bites, but it sure can chew up a lot of those disk things.

CP: No, b-y-t-e-s, bytes. That means how much memory.

SP: Memory?

CP: Never mind, I'll ask the salesperson. Just explain what you would like your computer to do.

SP: I've been thinking about an AI program and ...

CP: (interrupting) AI program? I only write programs in Basic!

SP: NO, Artificial Insemination, AI! Anyway, it certainly would be handy to have the computer keep a schedule of the sow herd's cycling.

CP: This is amazing, your pigs ride bicycles?!

SP: (exasperated) I said cycling - don't you know anything about swine production?

CP: (embarrassed) I'll have to read up on cycling. Why don't you tell me something else you want the computer to do?

SP: I'd like the computer to calculate some index to help me in culling the herd.

CP: Wait a minute, the computer can't talk - how can it help you call the herd.

SP: Not call ... CULL. (getting angry)

CP: Oh. Well, what is the formula for this index?

SP: I use the size of the loin-eye of litter mates and ...

CP: (interrupting again) Now is the loin eye the left eye or the right eye?

SP: (very angry and getting up to leave) You don't know anything about swine production ... I'm going to find somebody who can talk "pork"! (Starts out the door as CS returns with coffee.)

CS: Where are you going?

SP: I'm leaving and you can keep your computer! (leaves in a huff)

CS: What did you say, you numbskull?!

CP: I didn't say anything ... He/She didn't know a thing about the computer, I couldn't talk to someone like that!!

THE END

TERMINOLOGY IS IMPORTANT

Knowing business terminology will help you:

1. understand what is going on
2. gain credibility with customers
3. earn respect of employer and peers
4. get the job done correctly: you will be able to:

take directions	carry out directions
give directions	ask questions

Knowing terminology involves:

1. being able to spell the terms correctly
2. being able to define or explain the terms to someone else
3. being able to use the terms correctly in sentences, conversation and business situations

Shortcuts to Building Your Business Vocabulary

1. Put the words in prominent places where you will see them often.
2. Practice writing the words and terms correctly.
3. Concentrate on only a few new words at one time - don't overwhelm yourself.
4. Associate the terms with key words, examples, word origins, etc.
5. Work together.
6. Practice using the words in sentences.
7. USE the new words and terms every chance you get - both in and out of the classroom.

VOCABULARY
100 M

KEEP THESE WORDS IN SIGHT

Cut out the words below and tape them in prominent places at home or at school where you will see them every day (e.g., on the bathroom mirror, in your locker, on your bedroom door, above your desk, on the refrigerator door, on your notebook, etc.). Write the definition on the back for words that are difficult for you.

LIABILITY	CORPORATION
COOPERATIVE	SOLE PROPRIETORSHIP
CAPITAL	MANAGEMENT
PROFITS	PARTNERSHIP

SPELLING PO~~W~~WER IN BUSINESS TERMINOLOG~~IE~~Y

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

LIEBILITY ______________________________

COOPRATIVE ______________________________

PROFITS ______________________________

CORPORATION ______________________________

CAPITOL ______________________________

PARTNERSHIP ______________________________

MANIGEMINT ______________________________

SOUL PROPRIETORSHIP ______________________________

KEY

SPELLING POMWER IN BUSINESS TERMINOLOG~~IE~~Y

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

[✓ LIEBILITY]	LIABILITY
[✓ COOPRATIVE]	COOPERATIVE
PROFITS	PROFITS
CORPORATION	CORPORATION
[✓ CAPITOL]	CAPITAL
PARTNERSHIP	PARTNERSHIP
[✓ MANIGEMINT]	MANAGEMENT
[✓ SOUL PROPRIETORSHIP]	SOLE PROPRIETORSHIP

ASSOCIATE NEW TERMS WITH KEY WORDS

The new terms for this problem are listed below along with some suggested key words which may help you to remember the meaning of the words as they are used in business. Divide the class into small groups and have each student explain one term to the others in the group and give a key word to help in remembering the term. Use a glossary of business terms or a dictionary if you need help.

Term	Think of:
SOLE PROPRIETORSHIP	SOLE = SOLITAIRE One person playing cards, one person owns the business
LIABILITY	BIL = BILL A debt, responsibility for debts
PARTNERSHIP	Profits and losses divided into PARTS shared by two or more persons
CAPITAL	Wealth or resources
PROFITS	Money in your pocket
CORPORATION	CORPSE = a body, a lot of people working as one body
COOPERATIVE CORPORATION	COOPERATION = working together to help each other
MANAGEMENT	MANAGE = control or guide

DO YOUR SENTENCES MAKE SENSE?

Fill in the blanks in the following sentences with the correct word or term using the list at the bottom of the page.

1. The wealth or resources that are invested in a business (money, equipment, buildings, etc.) are known in the business world as ______________________________.
2. A major disadvantage of the ______________________________ way of doing business is that each partner is legally obligated to pay for the business debts made by the other partner or partners.
3. In general, most of the customers who use the services of a ______________________________ type of business are also the owners of the business.
4. The stockholders of a ______________________________ have voting power proportional to the number of shares of stock they own.
5. The objective of an agricultural business is to make a ______________________________ from the sale of agricultural supplies and services.

Choose the correct terms from the following list:

SOLE PROPRIETORSHIP
CAPITAL
MANAGEMENT
PROFIT
CORPORATION
COOPERATIVE
LIABILITY
PARTNERSHIP

KEY

DO YOUR SENTENCES MAKE SENSE?

Fill in the blanks in the following sentences with the correct word or term using the list at the bottom of the page.

1. The wealth or resources that are invested in a business (money, equipment, buildings, etc.) are known in the business world as CAPITAL.
2. A major disadvantage of the PARTNERSHIP way of doing business is that each partner is legally obligated to pay for the business debts made by the other partner or partners.
3. In general, most of the customers who use the services of a COOPERATIVE type of business are also the owners of the business.
4. The stockholders of a CORPORATION have voting power proportional to the number of shares of stock they own.
5. The objective of an agricultural business is to make a PROFIT from the sale of agricultural supplies and services.

Choose the correct terms from the following list:

SOLE PROPRIETORSHIP
CAPITAL
MANAGEMENT
PROFIT
CORPORATION
COOPERATIVE
LIABILITY
PARTNERSHIP

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESS

PROBLEM II - Where would I fit into the business organization?

Study Questions:

1. Why are businesses organized?
2. What are the functions of an agricultural business?
3. What are the four common ways in which businesses are organized?
4. How do I identify the chain of authority in a business organization?
5. What does the business expect of me as an employee?
6. What should I expect of the company I work for?
7.
8.

References:

1. Center for Research and Leadership Development in Vocational and Technical Eduation, The Ohio State University. 1965. Organizations and Functions of Agricultural Businesses.
2. Ohio Agricultural Education Curriculum Materials Service. 1976. Agricultural Business Supply and Service.
3. Department of Agricultural Education, Iowa State University. 1967. Business Procedures in Agricultural Occupations.
4.
5.

Instructional Materials:

1. OB-II-INFO-1, What does "organization" mean?
2. OB-II-TM-2, How can I recognize where I fit into the business organization?
3. OB-II-ACT-3, What do agricultural businesses in your community do for their customers?
4. OB-II-INFO-4, What are the functions of an agricultural business?

5. OB-II-INFO-5, Four common types of business organization
6. OB-II-ACT-6, Comparing the four common types of business organizations
7. OB-II-ACT-7, What are the advantages and disadvantages of each type of business organization?
8. OB-II-TM-8, Patterns of authority structure
9. OB-II-ACT-9, Who is responsible to whom?
10. OB-II-ACT-10, Look at your job description
11. OB-II-INFO-11, What should I expect from my employer?
12. OB-II-ACT-12, What does the business offer to me, the employee?
13. OB-II-INFO-13, Employee incentives
14. OB-II-ACT-14, Questions for discussion of employee incentives
15. OB-II-ACT-15, How are employees evaluated?
16. OB-II-ACT-16, What would your decision be?

Interest Approach: Introduce the problem area by examining the meaning of the word "organization". Ask the students to define organization. Use INFO-1 as a basis for class or small group discussion of business organization. Emphasize the importance of recognizing and carrying out your role as an employee within the business organization.

Learning Activities:

1. After students have explored the concept of business organization, introduce the five study questions to be addressed in solving the problem, "Where would I fit into the business organization?" by viewing TM-2.
2. Examine the functions performed by agricultural businesses in your community with ACT-3. Do Part I as a class. Provide access to telephone directory, phone to call local chamber of commerce, etc. Divide the class into groups for Part II. Provide each group with a large sheet of newsprint and felt-tip pen. Have each group choose a different agricultural business and have a group secretary

record the functions identified on the newsprint. Then tape these around the room and have one person from each group present the group's list. Compare the lists the students have compiled with the one found in INFO-4. Discuss any functions that were not identified.

3. Remind students that businesses are organized to derive an income from the sales of goods and services. Point out that capital investment, risk assumption, distribution of profits, and management can be handled through a variety of organizational structures. Compare and contrast the four common types of business organizations using INFO-5. Assist students in completing ACT-6 and ACT-7 individually, in small groups, or as a class.

4. Every employee should be able to determine the chain of authority in the business. Present the three common patterns of authority structure in businesses (TM-8). Give students practice in charting authority structure with ACT-9. Discuss the questions on ACT-9 as they relate to identifying authority patterns in an agricultural business.

5. Have students analyze and write a job description with ACT-10.

6. Discuss personnel policies using INFO-11. Emphasize that just as the business expects certain things from its employees, the employees expect certain things from the business. Have the students distinguish between obligations and incentives. Have students role play a perspective employee and employer discussing personnel policies (ACT-12).

7. Have students read INFO-13 and then discuss questions in ACT-14.

8. Divide students into small groups and use brainstorming techniques (ACT-15) to compile a list of criteria an employer might use in evaluating the performance of an employee (ACT-15). Then have students evaluate the case studies in ACT-16 and make a decision in each case.

Conclusion: Summarize the problem area by asking students how they can recognize where they would fit into a business organization. Have them respond orally or write the points on the blackboard. Then view TM-2 again.

Evaluation: As a result of this lesson, students should be able to:

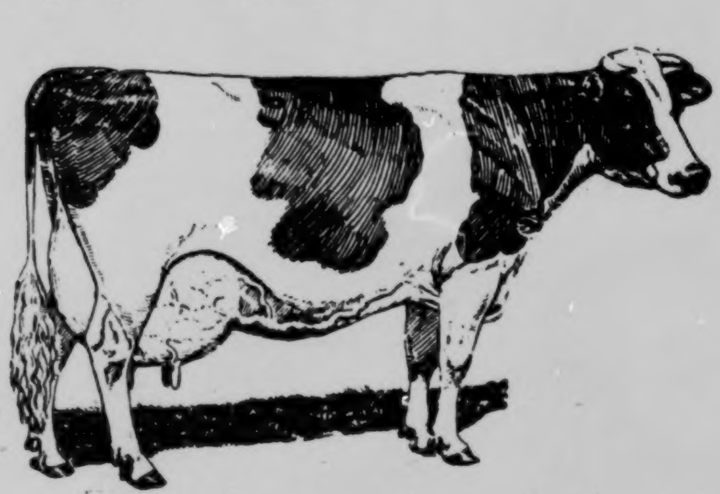
1. Explain the need for business organization.
2. Recognize the functions performed by agricultural businesses.
3. Assess the four common ways companies may be organized to do business.
4. Identify the chain of authority in a business organization.
5. Analyze specific duties and responsibilities contained in a job description.
6. Explain employer obligations to employee and employee incentives.
7. Describe evaluation criteria used within a system for promoting, transferring, and terminating employees.
8.
9.

Optional Learning Activities:

1. Students survey local businesses to determine personnel policy. Class develops survey form to use.
2. Have a panel of local agricultural business owners and employees discuss the way in which their businesses are organized and operate. Students should prepare some questions beforehand.
3. Use blank forms (ACT-17, ACT-18, ACT-19) to develop vocabulary building exercises for business terms in this problem area which students find difficult.
4.
5.

WHAT DOES "ORGANIZATION" MEAN?

The English word organ comes from the Greek word for tool. An organ is a structure designed to perform a specific function. For example, a dairy cow's heart is designed to pump blood, its stomach is designed to digest the type of food eaten, its udder is designed to store and deliver milk. The verb "to organize" means to arrange into a structure designed to perform a specific function. An organization is a systematic structure which allows individual things or persons to interact as a unified whole in performing a specific function.



A dairy cow can be considered as an organization (biological organizations, however, are usually called organisms). The function of a dairy cow is to produce milk. The dairy cow is organized to get this job done. Each organ in the cow performs a specific portion of the overall job of producing milk. The structure of the dairy cow is designed so that the activities of the separate organs are coordinated into a milk-producing system.

An agricultural business is also an organization. The function of a business is to unite people with resources in order to derive an income from the sales of goods or services. Businesses are organized to get this job done. Everyone in the business organization has a role to play in generating the income. The structure of a business is designed so that the activities of the individuals are coordinated into a profitable merchandising system.

As an employee in an agricultural business you are expected to perform a specific portion of the overall function. It is important to recognize where you fit into the business organization so that you can effectively perform your special role and realize your full potential.

Consider the following questions about the dairy cow and discuss how these concepts apply in a business organization.

1. Could the cow's stomach do the heart's job?
2. Could the stomach do its job without the heart?
3. How are the activities of the cow's separate organs coordinated?
4. What happens when one of the organs fails to do its job?

FEED
FERTILIZER

HOW CAN I RECOGNIZE WHERE I FIT INTO THE BUSINESS ORGANIZATION?

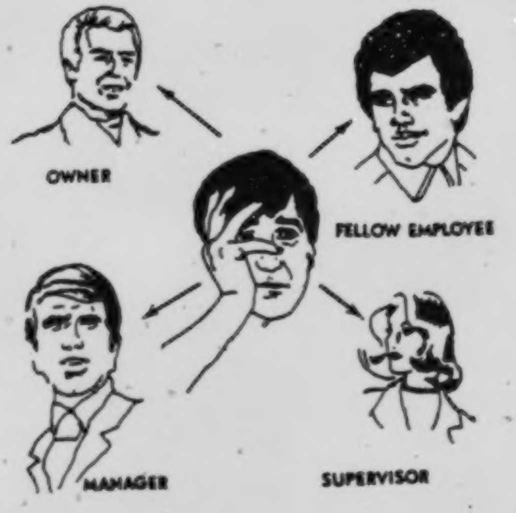
1. IDENTIFY THE OVERALL FUNCTION OF THE BUSINESS AND THE SUBFUNCTIONS PERFORMED BY EACH OF THE INDIVIDUALS OR DEPARTMENTS WITHIN THE BUSINESS.

2. IDENTIFY WHICH OF THE FOUR COMMON TYPES OF BUSINESS ORGANIZATION YOUR COMPANY REPRESENTS.

3. IDENTIFY THE CHAIN OF AUTHORITY WITHIN THE BUSINESS - HOW ARE THE ACTIVITIES OF INDIVIDUALS COORDINATED SO THAT THEY ACT AS A UNIFIED WHOLE?

4. ANALYZE THE SPECIFIC DUTIES AND RESPONSIBILITIES CONTAINED IN YOUR JOB DESCRIPTION - WHAT DOES THE COMPANY EXPECT OF YOU?

5. KNOW THE PERSONNEL POLICIES OF YOUR COMPANY - WHAT SHOULD YOU EXPECT OF THE COMPANY?



WHAT DO THE AGRICULTURAL BUSINESSES IN YOUR COMMUNITY DO FOR THEIR CUSTOMERS?

Part I. Make a list of the agricultural businesses in your community.

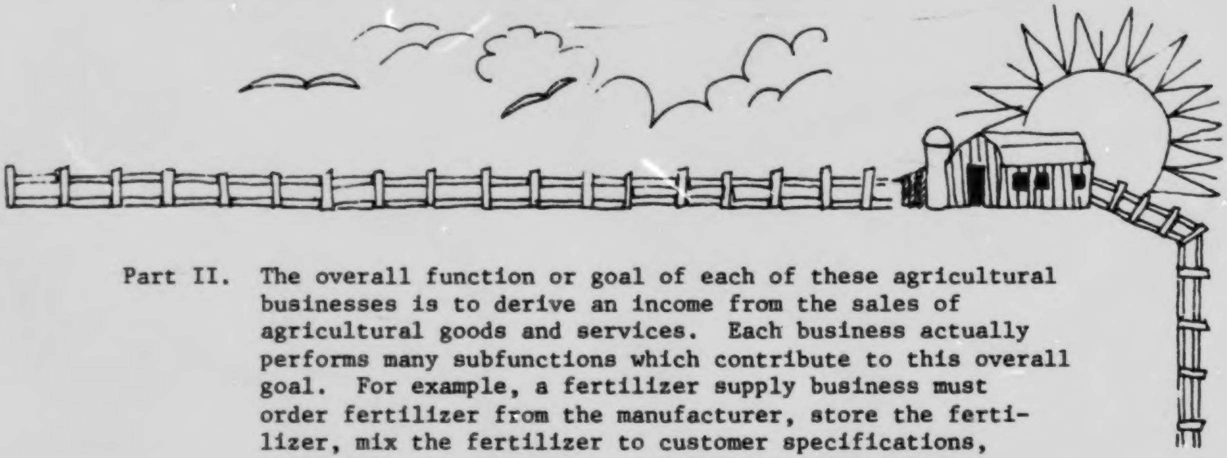
________________________________ ________________________________

________________________________ ________________________________

________________________________ ________________________________

________________________________ ________________________________

________________________________ ________________________________



Part II. The overall function or goal of each of these agricultural businesses is to derive an income from the sales of agricultural goods and services. Each business actually performs many subfunctions which contribute to this overall goal. For example, a fertilizer supply business must order fertilizer from the manufacturer, store the fertilizer, mix the fertilizer to customer specifications, give advice on proper use of fertilizer, and deliver and spread the fertilizer. Choose one of the agricultural businesses in your community. List at least six subfunctions performed by this agricultural business. Compare your list with the one found on INFO-4.

____

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____

____

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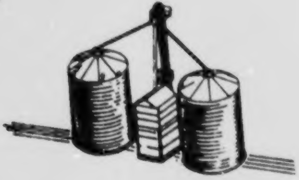
FEED
—
FERTILIZER

WHAT ARE THE FUNCTIONS OF AN AGRICULTURAL BUSINESS?

A. Overall function: To make a profit through sales of goods and services.

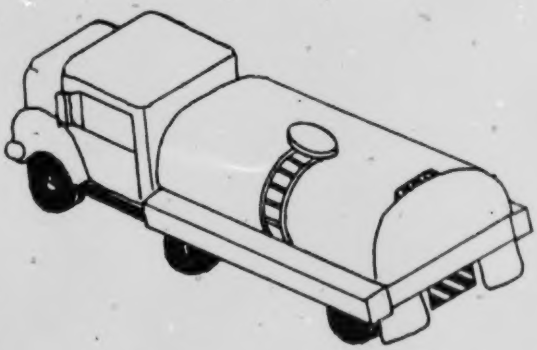
B. Subfunctions which contribute to overall function:



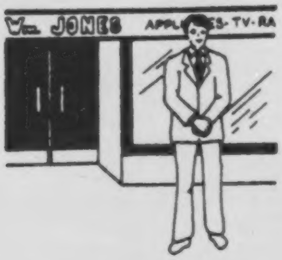
1. Assembling supplies for customers to buy.
2. Transporting supplies to customers.
3. Processing supplies for customers.
4. Sorting, grading or standardizing supplies not previously classified by the manufacturer or wholesaler.
5. Storing supplies until customers desire them.
6. Packaging supplies for customers.
7. Advertising available supplies.
8. Selling supplies.
9. Providing information on proper use of products sold.
10. Providing miscellaneous services, such as advising about planting or spraying.
11. Providing the capital to operate a business.
12. Assuming the risks of operating a business.

Source: Center for Research and Leadership Development in Vocational and Technical Education, The Ohio State University. 1965. Organizations and Functions of Agricultural Business.

FARM SUPPLY



FOUR COMMON TYPES OF BUSINESS ORGANIZATION



SOLE PROPRIETORSHIP

Business Owned by One Individual

Owner is Liable for 100% of Debts

Owner Gets Profits

Owner Determines Policies

GENERAL CORPORATIONS

Business Owned by Stockholders

Each Stockholder Liable Only Up to Amount Invested

Profits Shared Among Stockholders in Proportion to Stock Held

Policies Determined by Common Stockholders and Board of Directors

PARTNERSHIP

Business Owned by Two or More Individuals

Each Partner Can Be Held Liable for 100% of Business's Debts

Partners Share Profits (Usually in Proportion to Share in Capital Investment)

Partners Determine Policies by Voting (Voting Power Proportional to Share in Capital Investment)

COOPERATIVE CORPORATIONS

Business Owned by Member-Patrons

Individual Liability Limited to Amount Invested

Patrons Share in Profits on a Patronage Basis

Policies Determined by the Member-Patrons and Board of Directors (One Member - One Vote)

SOURCE: Adapted from Ohio Agricultural Education Curriculum Materials Service, 1976. Agricultural Business Supply and Service.

COMPARING THE FOUR COMMON TYPES OF BUSINESS ORGANIZATIONS

Complete the following chart.

Features Compared	Types of Business Organizations			
	Sole Proprietorship	Partnership	General Corporation	Cooperative Corporation
Who owns the business?				
How is the business financed?				
How is voting conducted?				
Who manages the company?				
Who gets the profits?				
Who is liable for the debts?				

Source: Adapted from Ohio Agricultural Education Curriculum Materials Service. 1976. Agricultural Business Supply and Service.

COMPARING THE FOUR COMMON TYPES OF BUSINESS ORGANIZATIONS

Complete the following chart.

Features Compared	Types of Business Organizations			
	Sole Proprietorship	Partnership	General Corporation	Cooperative Corporation
Who owns the business?	The individual	The partners (two or more)	The stockholders	The member-patrons
How is the business financed?	Individual invests private capital	Partners invest private capital	stocks are sold , each share representing a stated amount of investment	Member-patrons buy shares in the co-c corporation
How is voting conducted?	None needed	Usually be partner's share in capital invested	By shares of stock	Usually one member, one vote
Who manages the company?	The individual	The partners	Board of Directors	Board of Directors
Who gets the profits?	The individual	The partners, in proportion to capital invested	The stockholders, in proportion to stock held	The patrons on a patronage basis
Who is liable for the debts?	The individual is liable for 100%	Each partner is liable for 100%of the debts incurred by the business	Each stockholder is liable only up to amount invested	Each member-patron is liable only up to amount invested

Source: Adapted from Ohio Agricultural Education Curriculum Materials Service. 1976. Agricultural Business Supply and Service.

WHAT ARE THE ADVANTAGES AND DISADVANTAGES
OF EACH TYPE OF BUSINESS ORGANIZATION?

SOLE PROPRIETORSHIP

Advantages	Disadvantages
____________	____________
____________	____________
____________	____________
____________	____________

JONES
APPLIANCES · TV · RA

SOLE PROPRIETORSHIP

PARTNERSHIP

PARTNERSHIP

Advantages	Disadvantages
____________	____________
____________	____________
____________	____________
____________	____________

GENERAL CORPORATION

Advantages	Disadvantages
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________

GENERAL CORPORATIONS

COOPERATIVE CORPORATIONS

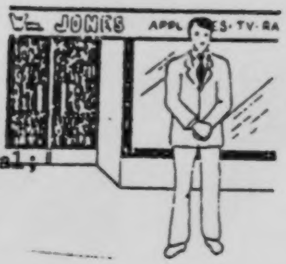
COOPERATIVE CORPORATIONS

Advantages	Disadvantages
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________

KEY

WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF EACH TYPE OF BUSINESS ORGANIZATION?

SOLE PROPRIETORSHIP



SOLE PROPRIETORSHIP

Advantages	Disadvantages
Simple to organize, manage, and dissolve; Profits taxed only once; Your own boss; Limited government regulation; little or no organization costs; privacy; relatively high credit ratings	Difficulty in obtaining large amounts of capital; responsiblity for all decisions; unlimited liability; lacks incentive for best employee; business is dissolved when owner dies

PARTNERSHIP

PARTNERSHIP

Advantages	Disadvantages
Permits specialization of duties among partners; greater financial strength than individual ownership; less government regulation than corporation types; desire of partners to carry their share often results in more profits.	Danger of disagreements among partners; possibility of weakened management from divided authority among partners; unlimited liablity; possible dissolution of business by death of one partner.

KEY

GENERAL CORPORATION

Advantages

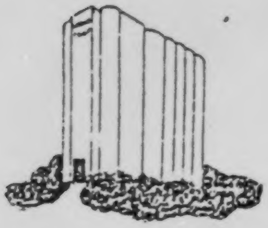
Limited liability; relatively easy to obtain capital by selling shares of stock; has perpetual life; considered a legal entity-owners cannot be sued; ease of transferring ownership; standard procedures protect stockholders; flexibility of business.

Disadvantages

Closely regulated by state and federal governments; inability of large corporations to maintain secrecy; highly taxed; profits double-taxed (both corporation and stockholders pay tax); Lower credit rating than individuals or partnerships; tend to be impersonal; lack of uniform state corporation laws.

GENERAL CORPORATIONS

COOPERATIVE CORPORATIONS



COOPERATIVE CORPORATIONS

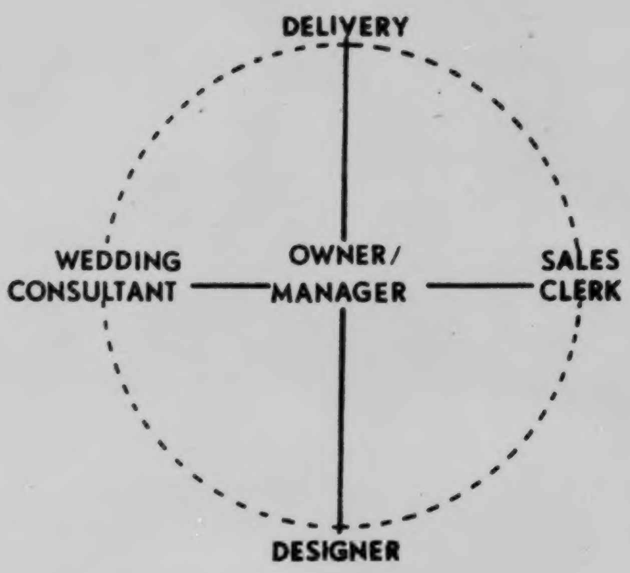
Advantages

Reduces bad effects of of lack of competition; Often improves member's bargaining power; does not have profits double taxed like other corpoations; permits close control of operations by members.

Disadvantages

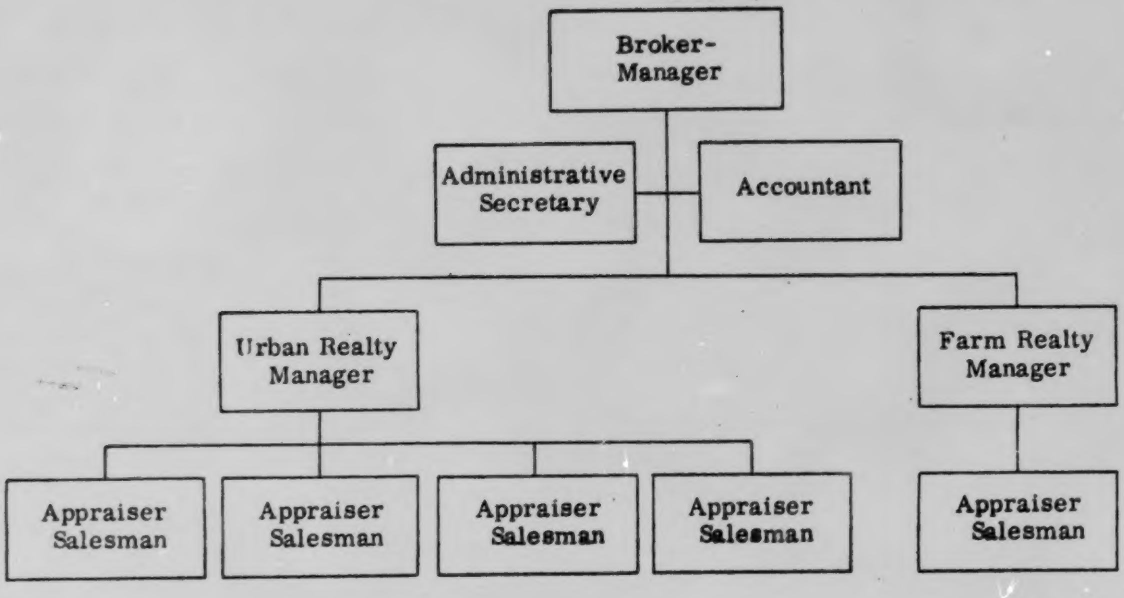
Frequent failure to pay adequate salaries to attract and hold superior managers; Failure of members to patronize their coops, thereby reducing volume and profits; takes too long to make decisions, ususally; board of directors frequently untrained and inexperienced for their policy-making responsibilities.

PATTERNS OF AUTHORITY STRUCTURE


DELIVERY
WEDDING CONSULTANT
OWNER/ MANAGER
SALES CLERK
DESIGNER

WHEEL

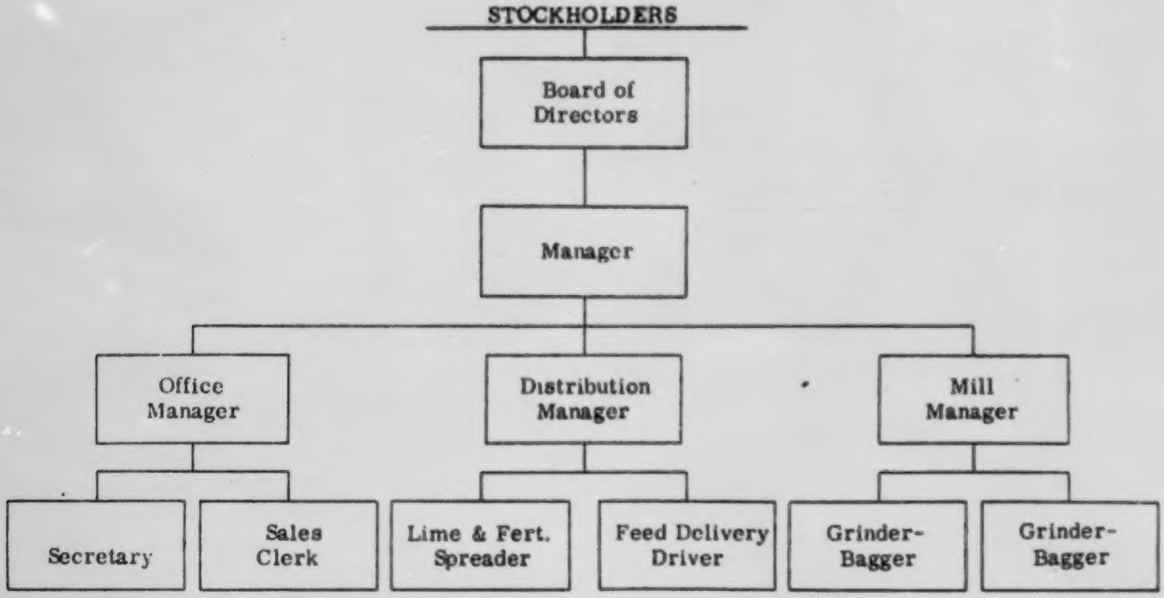
(EXAMPLE ILLUSTRATED: A SMALL FLORIST BUSINESS)


Broker-Manager
Administrative Secretary
Accountant
Urban Realty Manager
Farm Realty Manager
Appraiser Salesman
Appraiser Salesman
Appraiser Salesman
Appraiser Salesman
Appraiser Salesman

LINE AND STAFF

(EXAMPLE ILLUSTRATED: A FARM REALTY BUSINESS)

PATTERNS OF AUTHORITY STRUCTURE


STOCKHOLDERS
Board of Directors
Manager
Office Manager
Distribution Manager
Mill Manager
Secretary
Sales Clerk
Lime & Fert. Spreader
Feed Delivery Driver
Grinder-Bagger
Grinder-Bagger

LINE

(EXAMPLE ILLUSTRATED: A FEED & FERTILIZER SUPPLY BUSINESS)

SOURCE: OHIO AGRICULTURAL EDUCATION CURRICULUM MATERIALS SERVICE. 1976. AGRICULTURAL BUSINESS SUPPLY AND SERVICE.

WHO IS RESPONSIBLE TO WHOM?

There are many people involved in running a school system. Just as in a business organization, authority and responsibility are partitioned and delegated and the activities of individuals are coordinated through an established chain of authority. Draw a chart of the pattern of authority in your school system. Try to include the following in your chart: Students, Principal, Superintendent, Secretary, Teachers, Librarian, Maintenance crew, School Board, Taxpayers, Cafeteria Staff, Bus Drivers, Student Council.

Things to think about:

1. Which of the three patterns does your chart resemble?
2. What sort of things determine who has authority?
3. Why is the authority delegated?
4. What are some of the responsibilities and authority at each level of your chart?
5. What would happen if someone assumed authority beyond what is delegated in the authority pattern?
6. If you were a new employee in an agricultural business, how would you determine where you fit into the chain of authority?

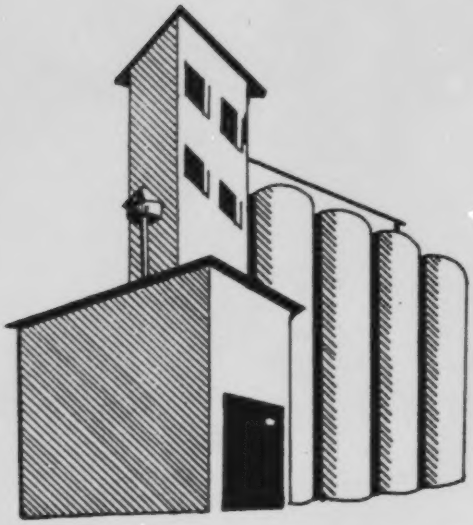
LOOK AT YOUR JOB DESCRIPTION

Below is a job description for an agricultural chemicals warehouse person. Discuss what the business expects of this employee and what types of qualifications such an employee would need. What responsibilities does this employee have that no other employee might have?

Agricultural Chemicals Warehouse Person

> The warehouse person will be responsible for maintaining an accurate inventory at all times; storing compatible chemicals in proper temperature; observe all safety regulations in storing and handling chemicals; provide an appealing display area and arrangement; operate and maintain storage, handling and transfer of equipment. Will be under supervision of the assistant manager.

Write a job description for a job you have held. (If you have not been employed previously, write a job description for your teacher's job.)



WHAT SHOULD I EXPECT FROM MY EMPLOYER?

A. Legal Obligations of all Employers:

1. Social Security Contributions
2. Minimum Wages
3. Unemployment Insurance Contributions
4. Workmen's Compensations Contributions
5. Compliance with Safety Regulations

B. Employee Incentives Provided by many Employers:

1. Group Life Insurance
2. Health and Accident Insurance
3. Pension Plans
4. Employee Discounts
5. Vacations
6. Recreational Activities
7. Bonuses
8. Commissions
9. Profit-sharing Plans

C. A Definite System for Employee Evaluation

1. Fair Criteria for Periodic Evaluation of Performance
2. In-service Training May be Included
3. Opportunity for Promotion and Advancement

WHAT DOES THE BUSINESS OFFER TO ME, THE EMPLOYEE?

Make a list of some important questions a perspective employee would want to ask the employer about company personnel policies. Use these questions to act out a portion of a job interview. Have one student assume the role of the perspective employee asking the questions about personnel policy, and have another student play the role of the employer. You may want to have several pairs of students role play so that all the questions get asked.

Some important questions to ask about personnel policy are:

____

____

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EMPLOYEE INCENTIVES

Employers often furnish their employees with benefits in addition to their regular salary. These items can be extremely valuable to an employee. It is to the worker's advantage that he knows exactly what benefits are given him by his explover and how they are administered. Listed below are some of the more common fringe benefits.

Sick Leave: In many cases a business will allow their employees a certain number of days per year for sick leave. That is, when an employee is ill, he may take time off from work without losing pay. This is a privilege that should not be abused. Pretending illness to gain a day off is looked upon by employers as being dishonest. Often these days, if unused, can be accumulated to a certain point and saved in case of major illness. This could be important to the person who would have to miss work for an extended period of time.

Hospitalization Insurance: Along with sick leave, hospitalization insurance is another benefit offered to protect employees in case of illness or accident. In most cases, when made available, the employer either pays all of the premium or shares the cost of the insurance with the employee. The insurance can cover a variety of items, but most usually includes hospital, surgical, and medical costs of illness or accident.

Time Off: Time off with pay is a benefit that varies widely from company to company. Most firms, however, do allow an employee time off with pay for vacation. This is usually offered only after an employee has been working for the company a specified period of time. The length of vacation allowed depends on company policy and length of service. This benefit is usually not extended to part-time workers.

Other days off are sometimes allowed with pay. These might include holidays, election day, jury duty, and death or illness in the family. As with vacations, this benefit is usually not extended to part-time workers.

Security Plans: Many industries operate pension plans separate from and in addition to the Social Security Plan sponsored by the federal government. The funds for these independent pension plans are usually provided entirely by the employer or may be on a cost-shared basis with the employee. Other security items sometimes offered by employers are severance pay in which a lump sum is paid to an employee when leaving the employ of a firm and subsidized savings plans in which the company contributes a certain amount for each dollar saved by an individual.

Bonuses: In some cases companies give year-end bonuses to employees. These usually amount to a portion of the individual's salary, such as one month or a portion of one month, one week, etc. The purpose of these bonuses is to reward employees for their efforts in helping the business earn profits throughout the year.

Another benefit sometimes provided by employers in the profit-sharing plan whereby the company shares with employees the profits earned by the business. In some cases this is done by offering employees shares of the corporation's stock.

SOURCE: Jordan and Voegeli, 1972. An Activity-Based Curriculum for Occupational Orientation. Alton, Illinois.

QUESTIONS FOR DISCUSSION OF EMPLOYEE INCENTIVES (FRINGE BENEFITS)

1. What fringe benefits have you received on past jobs?

2. If fringe benefits were not offered, base salaries could probably be higher. Do you think fringe benefits are worth this difference in salary? Why or why not?

3. If an employee is allowed five (5) days of sick leave each year, should he take the days even if he is not sick? What reasons can you give for your answer?

4. If you had the choice of your firm providing you with hospitalization insurance or paying the same amount in regular salary, which would you choose, and why?

5. Which would you consider to be the most valuable fringe benefits? Why?

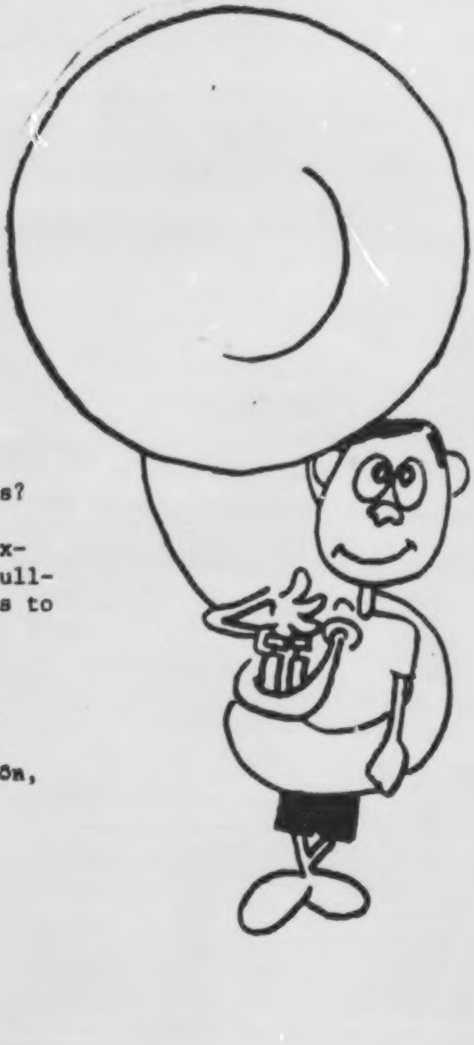
6. For what reasons do employers offer employees fringe benefits?

7. What effect might security plans have on your future? What influence would security considerations have on your decision to remain on a particular job?

8. Under what circumstances might an employer be justified in awarding a yearend bonus to one employee and not to another?

9. How do you suppose a profit-sharing plan would benefit employers?

10. Part-time workers are not usually extended as many fringe benefits as full-time employees. Do you believe this to be a fair practice? Why:



Source: Jordan and Voegeli. 1972. An Activity-Based Curriculum for Occupational Orientation. Alton, Illinois.

HOW ARE EMPLOYEES EVALUATED?

In your brainstorming group, think of as many criteria or points you might use as an employer in evaluating the performance of your employees (e.g., Is the employee on time?). List the criteria for evaluation in the space below.

BRAINSTORMING

Purpose: To have students generate (within a short time frame) as many ideas as possible in relation to a broad topic or a specific problem. No value judgments may be made by students in relation to another student's input. (Comments such as "that's stupid," "that's dumb," "that's a good idea," are no-no's!)

Encourage creative thinking to take precedence over practical thinking. All suggestions should be recorded for later discussions and/or modification.

Procedures:

1. Explain the purpose of brainstorming to the class.
2. Announce to the class members they will have a short time frame to work (within 3-5 minutes).
3. Also explain to the class that no student-to-student interchange may occur - all remarks should be directed to the recorder who records the idea without comment (the recorder may be a student or the teacher).
4. Divide class groups into small groups (groups of 12 members work best).
5. Assign a recorder in each group (or have a group select its own recorder).
6. Assign a group leader (or have the group select a leader). The leader must see to it that no idea is criticized, evaluated or reacted to.
7. Assign the problem or topic.
8. A follow-up of brainstorming is necessary. This may be accomplished through the use of a discussion group. At this point, evaluation of the ideas generated during the brainstorming session may be rank-ordered or expounded upon.
9. Optional: Make this a contest with a prize for the group that comes up with the longest list.

Source: Dr. Joe Townsend

WHAT WOULD YOUR DECISION BE?

Read the following case studies and then make a decision as indicated.

1. Bill works as a delivery person for Acme Feed Store. He figures that Mr. Jones, his employer, will never know how long it took him to make a delivery so he often hurries through his route sometimes being careless, sloppy and rude to the customers and then he takes the "extra" time he saved to go home for a short nap or over to the local cafe to have a coke with his friends. Several times customers have been kept waiting because the truck was not back in time to make another delivery before the store closed for the day. Mr. Jones saw the truck parked outside of Bill's home at 3:30 p.m. yesterday and today he has called Bill into his office. What do you think Mr. Jones should do? Fire Bill? Give him a second chance? Transfer him to the warehouse? Why? Do you think Bill understands where he fits into the business?

2. Mary works as a salesperson in a farm supply store. She has been taking night courses in business and farm management at the community college. Mr. Smith, her employer, has noted that she always arrives on time and is neatly attired. Several customers have remarked to Mr. Smith how friendly and helpful she has been to them when they were in the store. Mary has worked at the store for six months and it is time for her first evaluation. What do you think Mr. Smith should do? Increase her salary? Transfer her to the warehouse? Promote her to assistant manager? Why? Does Mary understand her role in the business organization?

KEEP THESE WORDS IN SIGHT

Cut out the words below and tape them in prominent places at home or at school where you will see them every day (e.g., on the bathroom mirror, in your locker, on your bedroom door, above your desk, on the refrigerator door, on your notebook, etc.). Write the definition on the back for words that are difficult for you.

ASSOCIATE NEW TERMS WITH KEY WORDS

The new terms for this problem are listed below. Suggest some phrases or key words which may help you to remember the meaning of the words as they are used in business. Divide the class into small groups and have each student explain one term to the others in the group and give a key word to help in remembering the term. Use a glossary of business terms or a dictionary if you need help.

Term	Think of:

SPELLING PO~~W~~WER IN BUS$\overset{I}{/}$NESS TERMINOLOG$\overset{Y}{\cancel{IE}}$

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

____

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____

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____

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UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM III: What do I need to know about the operating expenses of an agricultural business?

Study Questions:

1. What are the major operating expenses of an agricultural business?
2. How can employees affect the operating expenses?
3. Which operating expenses affect the employees directly?
4. Why should I be concerned with minimizing operating expenses?
5.
6.

References and Materials:

1. OB-III-ACT-1, Where does the money go?
2. OB-III-TM-2, Where does the money go?
3. OB-III-ACT-3, How can employees affect operating expenses?
4. OB-III-ACT-4, Investigations into business expenses.

Interest Approach: Have students complete the pie chart of business expenses, ACT-1. Use a telelecture (or have a local business person visit the class) to interview a local business person (this resource person should be contacted beforehand and asked to prepare for the call) about the company's expenses. (Questions could be handled as, "Approximately what percentage of your business's income goes to employee salaries?" etc.) Fill in the pie chart on TM-2 from this information. (Alternatively, the instructor may want to obtain the information from a business person and prepare the transparency master or a hook and loop presentation before the class.) Have students compare their estimated charts with the one completed with the help of the resource person on TM-2 (or the hook and loop board). Discuss points on which student's estimations were dramatically different from those provided by the business person.

Learning Activities:

1. Ask the students which items in ACT-1 they would like to see occupying a bigger slice of the pie if they owned a business. Which ones would they like to see as the smallest slices of the pie? Discuss how making some slices smaller would allow others to be increased (e.g. if utilities were smaller, maybe bonuses could be larger; if insurance costs were less, maybe salaries could be more). Ask students to explain in their own words how operating expenses, besides salary, affect employees in the business either directly or indirectly.

2. Ask students what things make a difference in the amount of premium payments they or their parents pay for auto insurance (e.g. number of claims filed for that individual, speeding tickets, other traffic violations, age, good grades, etc.) Discuss how a driver's behavior can affect the amount of money expended on insurance. They have students complete ACT-3.

3. Divide students into small groups and have them work on reports with ACT-4. Students may want to prepare information sheets to give to other class members when they present their reports.

Conclusion: Ask students to explain in their own words why an employee should be concerned with minimizing operating expenses.

Evaluation: As a result of this lesson, students should be able to:

1. List and describe the major operating expenses of an agricultural business.

2. Explain how employees can affect operating expenses.

3. Recognize the importance of being duly concerned about minimizing operating expenses.

Optional Learning Activities:

1. Have an insurance company representative speak to the class.

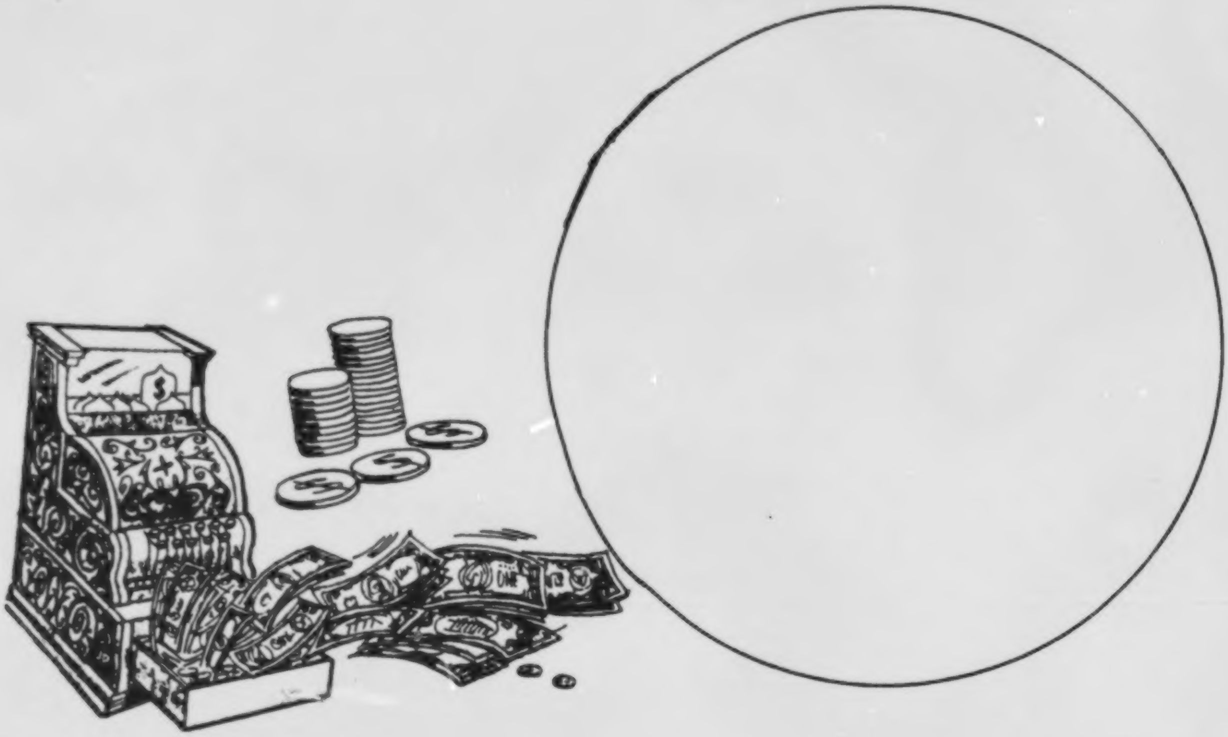
2. Have students fill out personal income tax forms.

3. Have students pretend they are employed in a local farm supply center and prepare an insurance program for the manager stating the amount of protection to be carried, the cost of the insurance, and the major provisions of the recommended policies.

WHERE DOES THE MONEY GO?

Divide up the pie chart below according to your own estimation of how the income from an agricultural business is spent. Begin by assigning a percentage to the following items (add others if you think they are necessary) and then mark off the pie chart and label it.

Expense Item	Percent of Total Expenses
Employee Salaries	
Taxes (e.g. real estate, income)	
Insurance (e.g. fire, motor vehicle)	
Social Security & Workman's Compensation Contributions	
Maintenance of Buildings & Equipment	
Utilities (electricity, water, heat)	
Inventory	
Employee Benefits (e.g. paid vacations, sick days, employee insurance, bonuses)	
Advertising and promotion	



WHERE DOES THE MONEY GO?

A pie chart reflecting the expenses of a local agricultural business.

HOW CAN EMPLOYEES AFFECT OPERATING EXPENSES?

List at least two things an employee could do to help reduce each of the following expenses. List at least two things an employee could do to cause an increase in these expenses. The first one is done as an example.

ACTIONS THAT COULD REDUCE EXPENSE	ACTIONS THAT COULD INCREASE EXPENSE
1. Maintenance of Building & Equipment	
Being conscientious in cleaning equipment properly.	Damaging equipment through careless operation.
______________________________	______________________________
2. Fire Insurance Premiums	
______________________________	______________________________
______________________________	______________________________
3. Utility Bills	
______________________________	______________________________
______________________________	______________________________
4. Employee Accident Insurance	
______________________________	______________________________
______________________________	______________________________
5. Inventory	
______________________________	______________________________
______________________________	______________________________

INVESTIGATIONS INTO BUSINESS EXPENSES

Choose one of the following topics and work as a group to prepare a brief (5 minutes) report. Your investigation into the topic may take you to the library, local business establishments, government offices, etc. Be sure you include a definition of the topic, the amount of money which might typically be spent on the item by a business, any laws or regulations affecting your topic.

Fire and Extended Coverage Insurance
Motor Vehicle Insurance
Liability Insurance
Workmen's Compensation
Social Security
Income Tax
Real Estate Tax
Depreciation of Buildings & Equipment
Group Employee Insurance Plans
Life Insurance
Utilities

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM IV - What are the sources of the money an agricultural business needs to meet operating expenses?

Study Questions:

1. What are the sources of credit for agricultural businesses?
2. What is financial soundness?
3. How is financial soundness measured?
4. What are ownership equity ratios?
5. What are the complete income and expenses incurred in an agricultural business?
6. What is a financial statement?
7. How is a complete income and expense budget prepared?
8. Why is financial soundness important to an employee in an agricultural business?
9.
10.

References and Materials:

1.

2.

3.

Evaluation: As a result of this lesson, students should be able to:

1. Explain the following credit instruments: checks, drafts, promissory notes, secured transactions, warehouse receipts, bills of lading, releases, and satisfactions.
2. Recognize the sources of agricultural credit.
3. Interpret a financial statement explaining the parts of the statement of operations and the balance sheet.
4. Distinguish business financial soundness and methods for measuring it.

5. Calculate ownership equity ratios and current ratios in measuring financial soundness.

6. Identify those complete income and expenses incurred in an agricultural business.

7. Propose a complete income and expense budget for a farm supply business.

8.

9.

Optional Learning Activities:

1. Bring examples of credit instruments to class.

2. Have students compare sources of credit by inviting representatives of agriculture lending agencies to speak to the class.

3. Examine the financial statements on company year-end reports.

4. Prepare a year's budget for the FFA chapter.

5. Prepare a presentation to the manager of a hypothetical or real agricultural business showing estimates of additional capital, labor, and facilities needed to add a service or related item for the public. Use records of sales by departments or inventory turnover or both to support the need for the added service or item. Present facts the manager would need to help reach a sound decision.

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM V - How do businesses manage to have the right amount of each product available at the time when the customers want them?

Study Questions:

1. Why is inventory control important?
2. What are the methods of controlling inventory?
3. What information must be known about each inventory item?
4. What forms and records are involved in inventory control?
5. What are the proper procedures for ordering, receiving, storing and handling inventory items?
6.
7.

References:

1. Williams, David L., ed. 1970. Handling Products and Personnel in Agricultural Firms. Agricultural Education Division, Vocational and Technical Education Department, University of Illinois at Urbana-Champaign.
2.
3.

Instructional Materials:

1. OB-V-ACT-1, Product Characteristics Affecting the Handling of Inventory
2. OB-V-ACT-2, Physical Count Inventory
3. OB-V-ACT-3, Perpetual Inventory
4. OB-V-INFO-4, Purchase Order
5. OB-V-INFO-5, Bill of Lading
6. OB-V-INFO-6, Receiving Record
7. OB-V-INFO-7, Invoice

8. OB-V-ACT-8, Completing a Purchase Order
9. OB-V-ACT-9, Interpreting a Bill of Lading
10. OB-V-ACT-10, Completing a Receiving Record
11. OB-V-ACT-11, Completing an Invoice
12. OB-V-ACT-12, Why All These Forms?
13. OB-V-ACT-13, Steps and Key Points in Inventory Control
14. OB-V-INFO-14, Questions to Think About During Field Trip
15. OB-V-ACT-15, Building a Business Vocabulary
16. OB-V-ACT-16, Inventory Scramble

Interest Approach: Ask students if they have ever gone into a place of business to purchase a particular item and were told the item was not in stock (a record album or tape, shoes or clothes in their size, part for a motorcycle or car, etc.). Discuss how they felt as customers. If it happened more than once at the same place how would they feel about that place of business? What did they do when they found out it was not available?

Learning Activities:

1. Have students complete ACT-1 and discuss product characteristics which have an affect on inventory control.
2. Explain the difference between a physical count inventory and a perpetual inventory and why both are used.
   a. Have the students take a physical count inventory of shop or classroom equipment (ACT-2). Emphasize that students should be careful in counting number of items, noting condition and value of each item.
   b. Have students complete the perpetual inventory problem (ACT-3) using the situational problem given. (Alternately, the KEY to ACT-3 may be used as an information handout for discussion.) Point out that there are three common types of perpetual inventory systems used in businesses nowadays:
      i. perpetual inventory sheets which record all items together on one list,

ii. stock inventory cards on which the sales and purchases of each item are recorded on a separate card, and

iii. computer systems with various types of entry and retrieval equipment (e.g., CRT, or cathode ray tube, terminal or line printer) and storage (e.g., disks, magnetic tape, magnetic ledgers, cards, etc.).

3. Have students read about each of the forms and records involved in restocking inventory (INFO-5 through INFO-7). Compare the information contained on the various forms. Note and discuss similarities, e.g., why does the purchase order number appear on all the forms?

4. Arrange to have students fill out a purchase order (ACT-8) for some supplies needed for the shop, the classroom, the FFA chapter, the school office, the school library, etc. If this is not possible, outline a situation and list items to be "purchased" on the blackboard.

5. Arrange to have a shipment delivered to the classroom or shop. If possible this could be an actual shipment of goods ordered by the school. Otherwise the instructor should put together a "shipment" or goods (include some damaged merchandise to give students practice in inspecting shipments). (The instructor should complete the bill of lading (ACT-9) to correspond to the arranged "shipment". Use the school name or class name as the consignee.) Have students role play the parts of a delivery person and warehouse personnel as they fill out the receiving record (ACT-10) and interpret the bill of lading (ACT-9).

6. Have students complete an invoice (ACT-11) as if it had accompanied the "shipment" of goods received in the classroom in ACT-9 and ACT-10.

7. Discuss the importance and interrelationship of all the forms, records, and personnel involved in inventory control with ACT-12.

Conclusion: Summarize the problem area by having students outline the steps and key points which should be followed in controlling inventory (ACT-13). (Alternately you may want to use ACT-13, KEY, as an information sheet to discuss inventory control procedures with students.)

Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of inventory control.
2. Describe methods of controlling inventory.
3. Accurately complete a physical count inventory.
4. Make accurate entries on a perpetual inventory.
5. Fill out and interpret the following forms: purchase order, receiving record, invoice and bill of lading.
6.
7.
8.

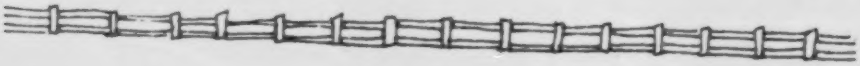
Optional Learning Activities:

1. Take a field trip (INFO-14) to observe how an agribusiness in your community handles inventory or use the telelecture to interview the owner of a local agricultural business.
2. Obtain a computerized inventory sheet from a local agricultural business which uses a computerized system. Have students examine the printout and compare it with the perpetual inventory sample form from ACT-3. Discuss the advantages and disadvantages of each system.
3. Have students complete vocabulary and spelling exercises (ACT-15 and ACT-16).
4. Use blank forms (ACT-17, ACT-18, ACT-19) to develop vocabulary building exercises for business terms in this problem area which students find difficult.
5. Have students calculate turnover rates of commonly sold agricultural merchandise either from information provided in a sample situation or from interviewing a local agricultural business person.
6.
7.

PRODUCT CHARACTERISTICS AFFECTING THE HANDLING OF INVENTORY

Consider the following items which might be sold by an agricultural supplies and services business. Answer the questions below.

SEED CORN
TRACTOR
VITAMINS
GREASE
HERBICIDES
SWINE FEED
FENCING MATERIAL
FARROWING STALLS
PARTS FOR CORN PLANTER
EAR TAGS FOR CATTLE
IRON SUPPLEMENT FOR BABY PIGS



1. What time of the year would customers purchase these items? ____________________

2. Which items might deteriorate if stored for a long period of time?
____

3. Which items might become obsolete if not sold during the current year?
____
____

4. Which items take up a lot of storage space?
____

5. Which items are usually bought in large quantities?
____

6. Which items are probably requested by many customers?
____
Which by only a few customers?
____

7. Which items are purchased regularly by customers?
____
Which are bought only once in a while?
____

SEED CORN
TRACTOR
VITAMINS
GREASE
HERBICIDES
SWINE FEED
FENCING MATERIAL
FARROWING STALLS
IRON SUPPLEMENT FOR BABY PIGS
PARTS FOR CORN PLANTER
EAR TAGS FOR CATTLE

8. Which items might have to be ordered from the manufacturer or wholesaler well in advance of when customers want them delivered?

9. Which items might require processing before delivery to the customer?

10. Which items might be affected by state or federal regulations on handling and storage?

11. How could these product characteristics affect the inventory decisions made in an agricultural supplies and services business?

OB-V

ACT-2

TAKE A PHYSICAL COUNT INVENTORY OF THE EQUIPMENT IN YOUR SHOP

PHYSICAL INVENTORY ________________ PAGE ______

SHEET NO. ________________ PRICED BY ______

CALLED BY ______ DEPARTMENT ______ EXTENDED BY ______

ENTERED BY ______ LOCATION ______ EXAMINED BY ______

CHECK	QUANTITY	DESCRIPTION	✓	PRICE	UNIT	EXTENSIONS
		AMOUNT FORWARD				

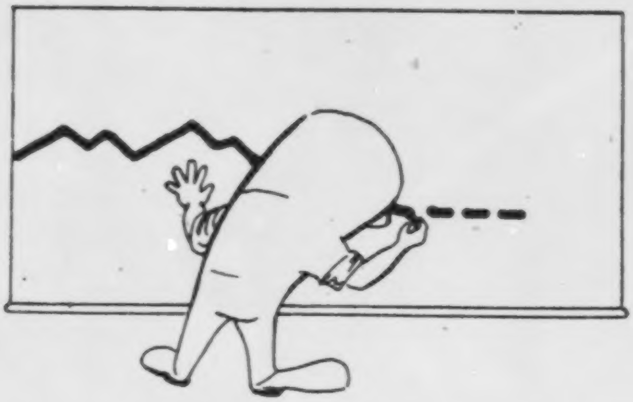
Boorum & Pease S1551 MADE IN U.S.A.

PERPETUAL INVENTORY

Record the following sales and purchases received on the perpetual inventory sheet (ACT-3 page 2). Record the atrazine sales and purchases on the perpetual inventory stock record card.

	SALES		ORDERS RECEIVED	
	Item	Amount	Item	Amount
4/1	Potash	4,280 lbs.		
4/1	Atrazine	50 cans		
4/2	Seed Corn	10 bags		
4/3			Seed Corn	1,000 bags
4/4	DAP*	5,000 lbs.		
4/4	Potash	3,010 lbs.		
4/5			Potash	6,000 lbs.
4/7	Seed Corn	100 bags		
4/7	Atrazine	223 cans		
4/7			Atrazine	200 cans
4/8	DAP	3,200 lbs.		
4/8	Potash	1,100 lbs.		
4/9	Seed Corn	480 bags		
4/10	Seed Corn	205 bags		
4/10	Zinc	7 bags	Potash	6,000 lbs.
4/11	Potash	5,720 lbs.		
4/11	DAP	500 lbs.		
4/13	Atrazine	315 cans	DAP	8,000 lbs.

*DAP = Diammonium phosphate



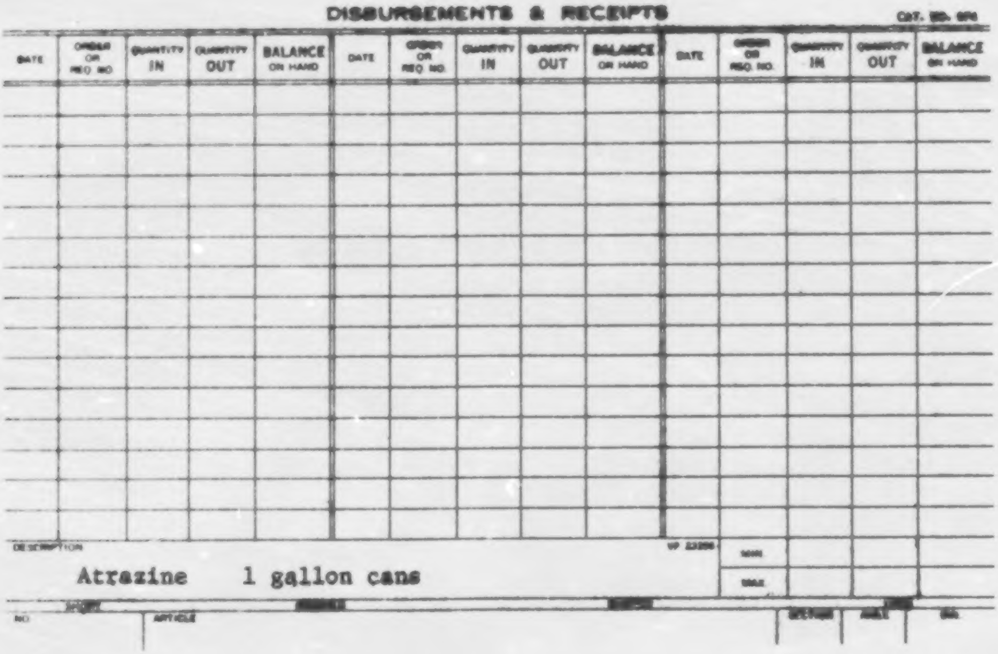
PERPETUAL INVENTORY

Date	Atrazine (1 gallon cans)			Potash (lbs)			DAP (lbs)			Seed Corn (50 lb bags)			Zinc (10 lb bags)		
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
Beginning of Month Balance			500			8,000			9,800			20			30

PERPETUAL INVENTORY

Stock Record Card System

(Record of ordered, received and sold for each item kept on a separate card.)



DISBURSEMENTS & RECEIPTS

DATE	ORDER OR REQ NO	QUANTITY IN	QUANTITY OUT	BALANCE ON HAND	DATE	ORDER OR REQ. NO.	QUANTITY IN	QUANTITY OUT	BALANCE ON HAND	DATE	ORDER OR REQ. NO.	QUANTITY IN	QUANTITY OUT	BALANCE ON HAND

DESCRIPTION

Atrazine 1 gallon cans

MIN

MAX

NO.

ARTICLE

Compare the following three approaches to recording perpetual inventory:

1. Inventory sheet system
2. Inventory stock record card system
3. Computerized inventory with CRT (cathode ray tube) terminal for entry.

What advantages might a stock record card system have when compared to a perpetual inventory sheet? Disadvantages?

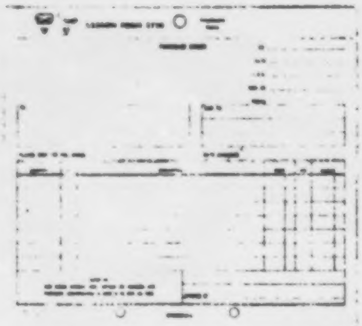
Which did you find easier to fill out?

Which contained more information per item?

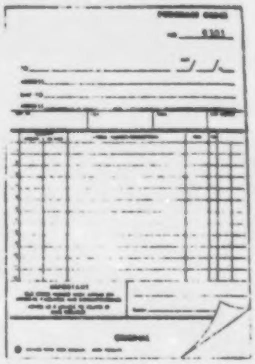
If you were a computer salesperson, what advantages of a computerized inventory system would you emphasize to convince the manager of an agricultural supply center to purchase a computer?

PURCHASE ORDER

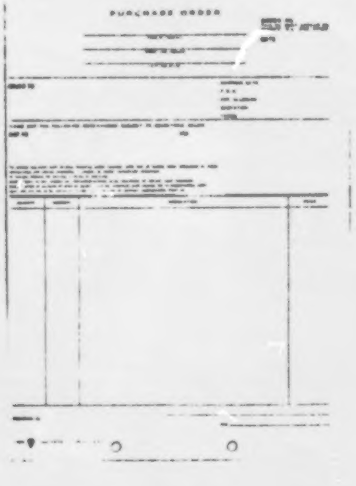
A PURCHASE ORDER is a document authorizing a vendor to deliver described merchandise or materials at a specified price.

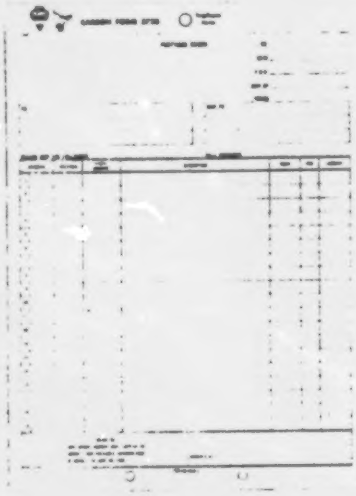


The following information is usually contained on a purchase order:



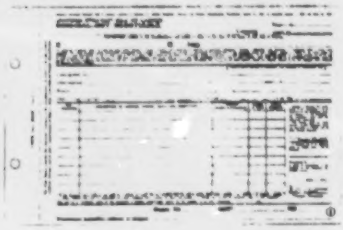
1. VENDOR'S NAME AND ADDRESS
2. "SHIP TO" NAME AND ADDRESS
3. PURCHASE ORDER NUMBER
4. HOW TO SHIP
5. F.O.B. (NAME OF LOCATION)
6. STATEMENT OF TERMS
7. QUANTITY OF EACH ITEM
8. STOCK NUMBER & DESCRIPTION OF EACH ITEM
9. PRICE OF EACH ITEM
10. DATE MERCHANDISE IS REQUIRED
11. SIGNATURE OF AUTHORIZED INDIVIDUAL IN ORDERING COMPANY



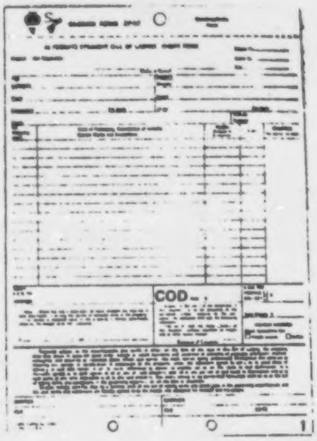


BILL OF LADING

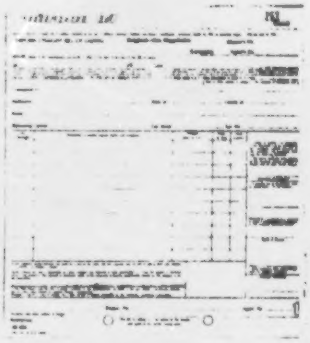
A BILL OF LADING is a written contract stating that a carrier has received goods from party and will deliver the goods at a specified place to the person named on the order. This document must meet requirements of the Interstate Commerce Commission.

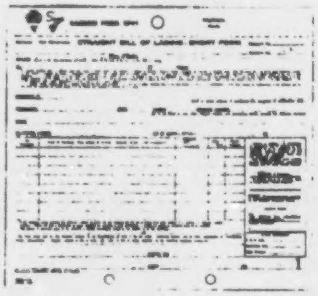


The following information is usually contained on a bill of lading:



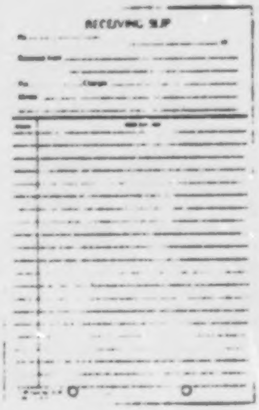
1. NAME OF CARRIER
2. "CONSIGNED TO" NAME
3. DESTINATION
4. DELIVERY ADDRESS
5. ROUTE
6. SHIPPER'S NUMBER
7. CARRIER'S NUMBER
8. STATEMENT OF TERMS
9. WEIGHT OF SHIPMENT
10. DESCRIPTION OF ITEMS IN SHIPMENT
11. RATE
12. CHARGES
13. SIGNATURE OF SHIPPER AND CARRIER



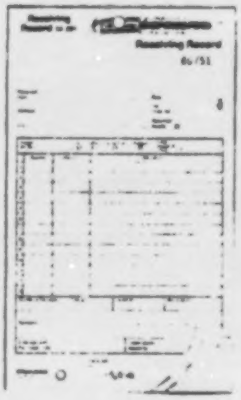


RECEIVING RECORD

A RECEIVING RECORD is a document describing a shipment of good received by the buyer. The receiving record is compared with the purchase order to verify that what was ordered was indeed received.



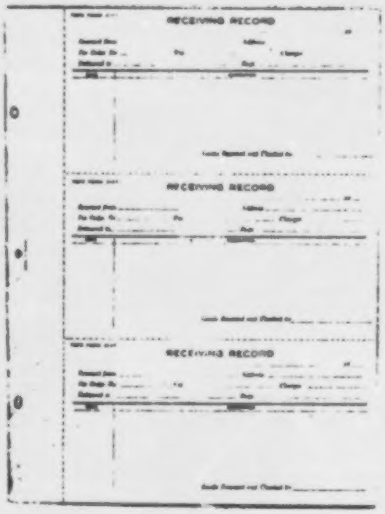
RECEIVING SLIP



Receiving Record

The following information is usually contained on a receiving record:

1. NAME & ADDRESS OF COMPANY THE SHIPMENT WAS RECEIVED FROM
2. DATE THE SHIPMENT WAS RECEIVED
3. TO WHOM THE SHIPMENT WAS DELIVERED
4. SIGNATURE OF PERSON RECEIVING & INSPECTING THE SHIPMENT
5. HOW THE ITEMS WERE SHIPPED (VIA)
6. PURCHASE ORDER NUMBER OF THE BUYER WHICH CORRESPONDS TO THE SHIPMENT
7. QUANTITY AND DESCRIPTION OF EACH ITEM IN THE SHIPMENT AS RECEIVED
8. MEMOS OR NOTES (e.g., ANY ITEMS WHICH ARE DAMAGED, UNORDERED, etc.)
9. CHARGES



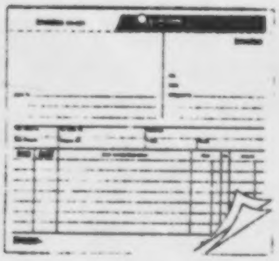
RECEIVING RECORD

RECEIVING RECORD

RECEIVING RECORD

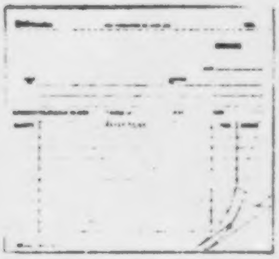
INVOICE

An INVOICE is a bill which shows the description, quantity, price, terms, and other particulars of goods sold or services rendered.



The following information is usually contained on an invoice:

1. "SOLD TO" NAME & ADDRESS
2. "SHIP TO" NAME & ADDRESS
3. CUSTOMER'S PURCHASE ORDER NUMBER
4. SALESPERSON'S NAME
5. STATEMENT OF TERMS
6. SHIPPED VIA
7. F.O.B. (NAME OF LOCATION)
8. DATE
9. QUANTITY, DESCRIPTION, UNIT PRICE & EXTENDED PRICE FOR EACH ITEM
10. TOTAL AMOUNT OF CHARGES FOR ENTIRE SHIPMENT



COMPLETING A PURCHASE ORDER

Complete the PURCHASE ORDER according to the specifications provided by your instructor.

No.

ABOVE ORDER NO. MUST APPEAR ON ALL PAPERS AND PACKAGES RELATIVE TO THIS ORDER

PURCHASE ORDER

TO ______________________

SHIP TO ______________________

DATE	SHIP VIA	ROUTING	DATE REQUIRED	TERMS	REQUISITION NO.
/ /			/ /		

QUANTITY		PLEASE ENTER OUR ORDER FOR GOODS LISTED BELOW:		UNIT PRICE	TOTAL
ORDERED	RECEIVED	STOCK NUMBER	DESCRIPTION		

PLEASE SEND ________ COPIES OF YOUR INVOICE WITH ORIGINAL BILL OF LADING

IMPORTANT

PLEASE NOTIFY US IMMEDIATELY IF YOU ARE UNABLE TO SHIP COMPLETE ORDER BY DATE SPECIFIED

PURCHASING AGENT ______________________

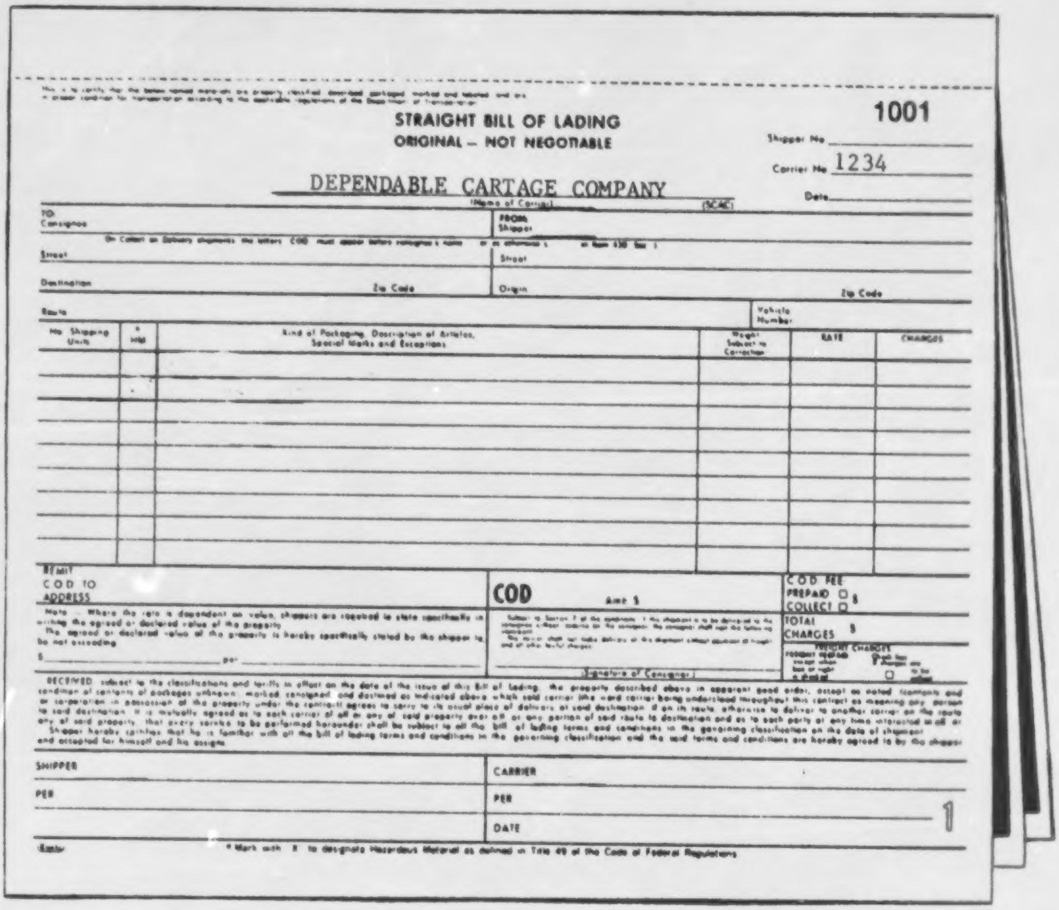
RECEIVED BY ______________________ DATE RECEIVED / /

1S 154 Rediform®

Poly Pak (50 sets) 1P 154

INTERPRETING A BILL OF LADING

Answer the questions below using the sample BILL OF LADING.



STRAIGHT BILL OF LADING
ORIGINAL — NOT NEGOTIABLE

1001

Shipper No. ______

Carrier No. 1234

Date ______

DEPENDABLE CARTAGE COMPANY
(Name of Carrier) (SCAC)

TO: Consignee	FROM: Shipper
Street	Street
Destination Zip Code	Origin Zip Code
Route	Vehicle Number

No. Shipping Units	* HM	Kind of Packaging, Description of Articles, Special Marks and Exceptions	Weight (Subject to Correction)	RATE	CHARGES

REMIT COD TO ADDRESS

COD Amt $

COD FEE PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

Note — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ ______ per ______

(Signature of Consignor)

SHIPPER	CARRIER
PER	PER
	DATE

* Mark with X to designate Hazardous Material as defined in Title 49 of the Code of Federal Regulations

1

1. What is the name of the company that shipped the goods?

____

2. What is the name of the company that transported and delivered the goods?

____

3. Who ordered the goods?

____

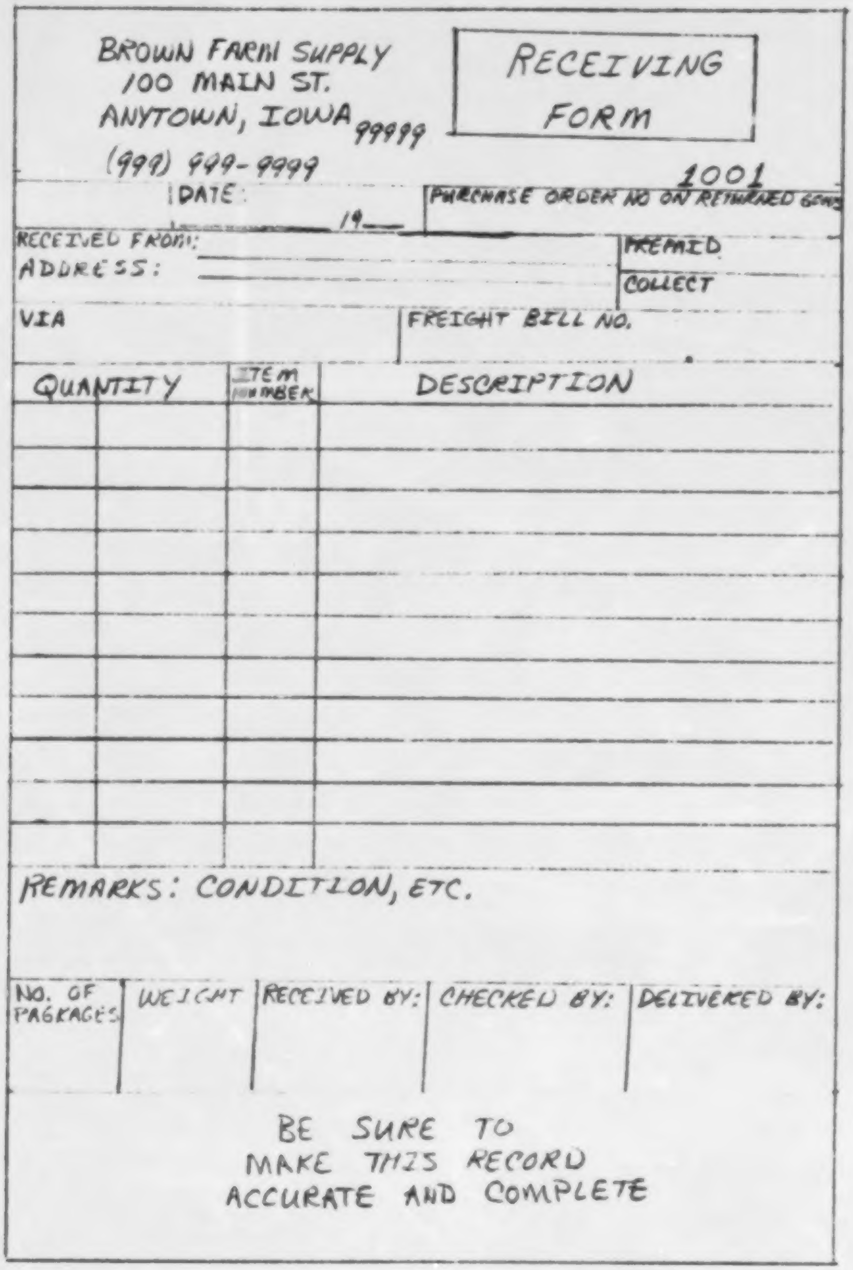
4. What are the total charges for the shipment? __________

5. What part(s) of this document make it a legal contract?

____

COMPLETING A RECEIVING RECORD

Complete the following form according to the "shipment" you receive in the classroom.



BROWN FARM SUPPLY
100 MAIN ST.
ANYTOWN, IOWA 99999
(999) 999-9999

RECEIVING FORM

1001

DATE: ________ 19__

PURCHASE ORDER NO ON RETURNED GOODS

RECEIVED FROM: ____________

ADDRESS: ____________

PREPAID

COLLECT

VIA

FREIGHT BILL NO.

QUANTITY		ITEM NUMBER	DESCRIPTION

REMARKS: CONDITION, ETC.

NO. OF PACKAGES	WEIGHT	RECEIVED BY:	CHECKED BY:	DELIVERED BY:

BE SURE TO
MAKE THIS RECORD
ACCURATE AND COMPLETE

COMPLETING AN INVOICE

Complete the following INVOICE as if it accompanied the "shipment" received in the classroom for ACT-10.

INVOICE

INVOICE NO.
09002

SOLD TO

SHIP TO

CUSTOMER'S ORDER	SALESMAN	TERMS	SHIPPED VIA	F.O.B.	DATE

REDIFORM. 7S724
[illegible]

WHY ALL THESE FORMS?

There are many people and many other businesses involved in the process of inventory control in an agricultural supplies and services business. Using what you have learned about the process and the records and forms involved in inventory control, complete the following scenarios.

1. The Jones Agrichemical Center is located in a small Iowa farming community. Mr. Jones decided it was time to increase the herbicide inventory in preparation for the planting season. He instructed his assistant, Joe Smith, to order 1,000 liters of Shurfine Herbicide from the Shurfine Chemical Corporation. Joe Smith filled out and authorized the purchase order, but he carelessly wrote "10,000 one liter containers" instead of "1,000 one liter containers". What do you suppose will happen?

2. Bill Brown is a farmer. He needed some planter boxes to convert his planter for narrow row soybeans, so he called the Reliable Implement Company in Farmtown, about thirty miles away. Sam Smith, who works at Reliable Implement, checked the inventory records and told Mr. Brown that they had all the planter boxes he needed in stock and he could pick them up that afternoon. However, last month, John Black, had taken a physical count inventory and had miscounted the planter boxes. Actually there was only one planter box in the warehouse instead of ten, as the inventory records showed. What do you suppose will happen?

3. Mary White works in the receiving room at the Acme Farm Supply. A shipment of animal health products arrived, but Mary was tired and didn't take the time to carefully inspect the shipment when she filled out the receiving record. Two days later it was discovered that all of the bottles in one carton were broken and leaking. What do you suppose will happen?

4. You have a job in the warehouse at Green's Fertilizer and Seed Store. What do you suppose your responsibilities in inventory control might be? What would your attitude towards paperwork be? What could you do to insure that your responsibilities and duties are carried out correctly and accurately?

STEPS AND KEY POINTS IN INVENTORY CONTROL

INVENTORY CONTROL

Mary Brown and Paul Jones are partners in a farm supply business. They sell bulk fertilizer, anhydrous ammonia, herbicides, insecticides, fungicides, and seed corn and soybeans. They want to be sure and have the right amount of everything that their customers want at the time they want them. They are also concerned about storage space, capital invested in the inventory, and handling and storage regulations. What procedure should Ms. Brown and Mr. Jones follow in order to maintain a balanced inventory?

Outline the important steps they should follow in controlling their inventory and fill in the key points they should consider when carrying out each step in the inventory control plan.

STEPS	KEY POINTS
1.	a.
	b.
	c.
	d.
2.	a.
	b.
	c.
	d.

STEPS	KEY POINTS
3.	a.
	b.
	c.
	d.
4.	a.
	b.
	c.
	d.
5.	a.
	b.
	c.
	d.
6.	a.
	b.
	c.
	d.

KEY(suggested answers)

STEPS AND KEY POINTS IN INVENTORY CONTROL

INVENTORY CONTROL

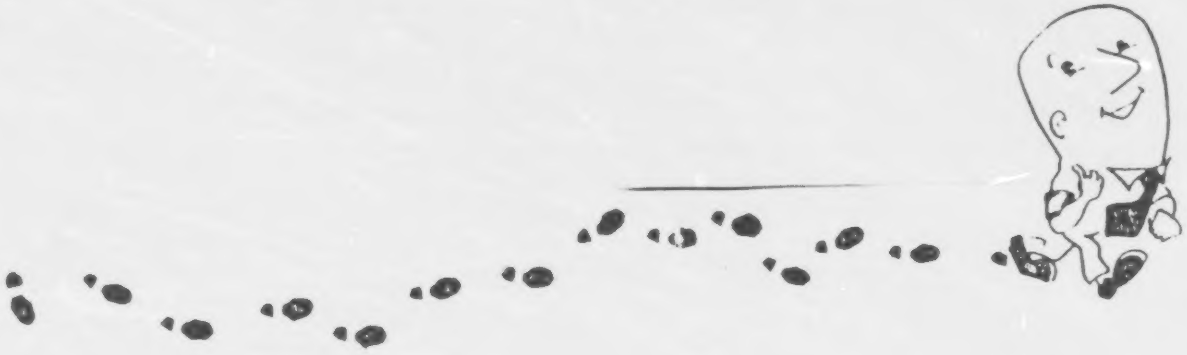
Mary Brown and Paul Jones are partners in a farm supply business. They sell bulk fertilizer, anhydrous ammonia, herbicides, insecticides, fungicides, and seed corn and soybeans. They want to be sure and have the right amount of everything that their customers want at the time they want them. They are also concerned about storage space, capital invested in the inventory, and handling and storage regulations. What procedure should Ms. Brown and Mr. Jones follow in order to maintain a balanced inventory?

Outline the important steps they should follow in controlling their inventory and fill in the key points they should consider when carrying out each step in the inventory control plan.

STEPS	KEY POINTS
1. DETERMINE PERIODICALLY HOW MUCH OF EACH ITEM IS IN STOCK	a. Schedule physical count inventory at regular intervals (e.g. monthly) b. Note the condition of all items in the inventory c. Calculate the value of all items in the inventory so that capital invested d. is known
2. DETERMINE THE PROBABLE CUSTOMER DEMAND FOR EACH ITEM	a. Evaluate last year's sales and inventory records b. Consider weather and planting conditions c. Note any special predicted insect or weed problems in the area for this season d. Decide if new items should be added or if some items should not be restocked because of obsolescence

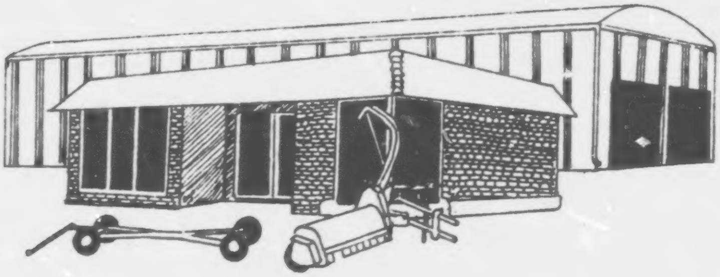
KEY

STEPS	KEY POINTS
3. DETERMINE WHEN AND HOW MUCH OF EACH ITEM TO ORDER	a. Consider amount of storage space b. Consider when farmers will want delivery c. Note how long it takes for delivery from manufacturer or wholesaler d. Calculate turnover rates of items and shelf life e. Consider capital needed for purchase
4. KEEP ACCURATE RECORDS OF ITEMS ORDERED AND ITEMS RECEIVED	a. purchase orders on file b. receiving records completed properly c. invoices filed d. bills of lading filed
5. STORE, SHELVE AND SELL INVENTORY SYSTEMATICALLY	a. Will system be first in first out (FIFO) or last in first out (LIFO)? b. Consider product storage requirements c. d.
6. KEEP THE INVENTORY RECORDS CURRENT	a. Records of all sales on perpetual inventory b. Records of all purchases and goods recived on perpetual inventory c. Reconcile perpetual inventory with physical count inventory d.



QUESTIONS TO THINK ABOUT DURING FIELD TRIP

1. HOW OFTEN DOES THE BUSINESS TAKE A PHYSICAL COUNT INVENTORY?
2. WHAT IS THE TURNOVER RATE ON SOME OF THE MAJOR ITEMS IN THE INVENTORY?
3. ARE THERE ANY ITEMS IN THE INVENTORY WHICH POSE PARTICULAR PROBLEMS IN TERMS OF STORAGE, SHELF LIFE, HANDLING, PROCESSING, ETC.?
4. HOW DOES THE MANAGER OF THE BUSINESS DETERMINE THE QUANTITY OF ITEMS TO PURCHASE AT ONE TIME?
5. HAS THIS BUSINESS EVER HAD A PROBLEM WITH OVERSTOCKED OR UNDERSTOCKED ITEMS? HOW DID THIS BUSINESS HANDLE THE PROBLEM?
6. WHAT PROCEDURES ARE FOLLOWED IN RECEIVING SHIPMENTS OF MATERIALS ORDERED?
7. WHAT PROCEDURES ARE FOLLOWED IN STOCKING THE SHELVES?
8.
9.
10.



BUILDING A BUSINESS VOCABULARY: INVENTORY CONTROL

Match the words from the left-hand column with their proper definition in the right-hand column.

_____ F.O.B.

_____ INVENTORY

_____ BILL OF LADING

_____ PURCHASE ORDER

_____ INVOICE

_____ RECEIVING RECORD

_____ TURNOVER

_____ PHYSICAL COUNT INVENTORY

_____ PERPETUAL INVENTORY

_____ OVERSTOCKED

_____ UNDERSTOCKED

a. A list of the actual count, weight or measure of all items in stock made by actual observation.

b. A list of items in stock kept as a continuous record of items on hand plus items purchased and minus items sold.

c. The number of times that an inventory item must be replaced (i.e., reordered) in a given time period, usually a year.

d. A list of merchandise on hand, in transit, and in storage.

e. A written contract stating that a carrier has received goods from one party and will deliver the goods at a specified place to the person named on the order.

f. Not having enough of an item on hand to meet customer demand.

g. A document showing the description, quantity, price, terms, and other particulars of goods sold or services rendered: a bill.

h. Having more of an item on hand than can be sold.

i. A document authorizing a vendor to deliver described merchandise or materials at a specified price.

j. A document describing goods received which is then compared with purchase order and supplier's invoice as verification that what was ordered was indeed received.

k. Literally "free on board"; a symbol indicating that the invoice cost to the purchaser includes the cost of delivery, at seller's risk, to the stated location: the purchaser assumes transportation and delivery costs and risks after goods arrive.

KEY

BUILDING A BUSINESS VOCABULARY: INVENTORY CONTROL

Match the words from the left-hand column with their proper definition in the right-hand column.

k. F.O.B.

d. INVENTORY

e. BILL OF LADING

i. PURCHASE ORDER

g. INVOICE

j. RECEIVING RECORD

c. TURNOVER

a. PHYSICAL COUNT INVENTORY

b. PERPETUAL INVENTORY

h. OVERSTOCKED

f. UNDERSTOCKED

a. A list of the actual count, weight or measure of all items in stock made by actual observation.

b. A list of items in stock kept as a continuous record of items on hand plus items purchased and minus items sold.

c. The number of times that an inventory item must be replaced (i.e., reordered) in a given time period, usually a year.

d. A list of merchandise on hand, in transit, and in storage.

e. A written contract stating that a carrier has received goods from one party and will deliver the goods at a specified place to the person named on the order.

f. Not having enough of an item on hand to meet customer demand.

g. A document showing the description, quantity, price, terms, and other particulars of goods sold or services rendered: a bill.

h. Having more of an item on hand than can be sold.

i. A document authorizing a vendor to deliver described merchandise or materials at a specified price.

j. A document describing goods received which is then compared with purchase order and supplier's invoice as verification that what was ordered was indeed received.

k. Literally "free on baord": a symbol indicating that the invoice cost to the purchaser includes the cost of delivery, at seller's risk, to the stated location, the purchaser assumes transportation and delivery costs and risks.

INVENTORY SCRAMBLE

Unscramble the words in the left-hand column and write them correctly in the right-hand column. Use the letters which fall in the circles to form the missing word in the sentence below.

REVONRUT	_ _ _ _ _ _ ◯ _
KVOESCERTOD	_ _ _ _ _ _ _ _ _ _ ◯
VCIINOE	_ _ _ _ _ ◯ _
SHRAPCUE ERODR	_ _ _ _ _ ◯ _ _ _ _ _ _ _
LIBL FO IDLAGN	◯ _ _ _ _ _ _ _ _ _ _ _ _
TEPPRUAEL NTYNOVIER	_ _ _ _ _ _ _ _ ◯ _ _ _ _ _ _ _ _ _
CERGVEIIN CREODR	_ _ _ _ _ _ _ ◯ _ _ _ _ _ _ _
DACHREMSENI	_ _ _ _ _ ◯ _ _ _ _ _

IT IS IMPORTANT FOR A BUSINESS TO MAINTAIN A _ _ _ _ _ _ _ _
INVENTORY.

KEY

INVENTORY SCRAMBLE

Unscramble the words in the left-hand column and write them correctly in the right-hand column. Use the letters which fall in the circles to form the missing word in the sentence below.

REVONRUT	TURNOVER
KVOESCERTOD	OVERSTOCKED
VCIINOE	INVOICE
SHRAPCUE ERODR	PURCHASE ORDER
LIBL FO IDLAGN	BILL OF LADING
TEPPRUAEL NTYNOVIER	PERPETUAL INVENTORY
CERGVEIIN CREODR	RECEIVING RECORD
DACHREMSENI	MERCHANDISE

IT IS IMPORTANT FOR A BUSINES TO MAINTAIN A BALANCED INVENTORY.

SPELLING PO~~M~~WER IN BUS/INESS TERMINOLOG~~XX~~Y

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

____

____

____

____

____

____

____

____

ASSOCIATE NEW TERMS WITH KEY WORDS

The new terms for this problem are listed below. Suggest some phrases or key words which may help you to remember the meaning of the words as they are used in business. Divide the class into small groups and have each student explain one term to the others in the group and give a key word to help in remembering the term. Use a glossary of business terms or a dictionary if you need help.

Term	Think of:

KEEP THESE WORDS IN SIGHT

Cut out the words below and tape them in prominent places at home or at school where you will see them every day (e.g., on the bathroom mirror, in your locker, on your bedroom door, above your desk, on the refrigerator door, on your notebook, etc.). Write the definition on the back for words that are difficult for you.

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM VI - What happens if a customer wants to pay later for supplies needed now?

Study Questions:

1. What is a credit policy?
2. What factors are considered in determining credit risk?
3. How is a customer's credit rating determined?
4. What types of consumer credit are available?
5. What is the cost to the business of extending customer credit?
6. What is the Truth-in-Lending Act?
7.

References and Materials:

1. State Department of Vocational and Technical Education, Stillwater, Oklahoma, 1972. Cooperative Vocational Education. pp. 51F-76F.
2. Department of Agricultural Education, Iowa State University, Ames, Iowa, c1968. Business Procedures in Agricultural Occupations.
3. Department of Vocational and Technical Education, University of Illinois, Urbana, Illinois, 1974. Teaching Source Units for Cooperative Occupational Education Related Class.

Interest Approach: Hand students advertisement for cars from magazines. Ask students how many of them own a car, how many would like to own a car, what kind of car would they like, how many have enough money to buy a car. Ask how many students would need to buy a car on credit and have students explain what credit means in their own words.

Learning Activities:

1. Have students complete ACT-1 and then write on the blackboard the reasons why the agricultural supplies they listed would

be sold on credit rather than for cash. Ask students to explain why extending credit to customers is a service; discuss the risks a business assumes in extending credit to customers.

2. Use ACT-2 to begin study of credit policy. Ask students why it would be important for each employee to know and be able to implement the business's credit policy.

3. Have students work in small groups to complete ACT-3 and then view TM-4 on the 6 C's of credit. Have students rate themselves in regard to the 6 C's and have them suggest ways in which they might improve their own credit rating.

4. Give students practice in implementing credit policies through role playing (ACT-5).

5. Explain the different forms of consumer credit available and discuss which forms are most appropriate to agricultural supplies and services businesses. Have students complete ACT-6.

6. Use ACT-7 as an oral or written exercise in the vocabulary of credit.

7. Give students practice in calculating interest with ACT-8.

8. View TM-9 while discussing what costs to the business are involved in extending credit. Ask students to explain how a business could get into financial problems with a poorly thought out credit policy or if the business was not conscientious in implementing its credit policy.

9. Present the Truth-in-Lending Act with TM-10.

Conclusion: Summarize the problem area by having students simulate a board of directors meeting in which they set up the credit policies of a company (ACT-11). This activity may be done in small groups and then students could discuss the similarities and differences of the policies set up by each group.

Evaluation: As a result of this lesson, students should be able to:

1. Explain how the credit policies of a company affect its business.

2. Explain the factors which are considered in determining credit risk.

3. Formulate the procedure used to determine a customer's credit rating.

4. Compare the types of available consumer credit.

5. Appraise the business's cost of extending credit.

6. Compute interest charges.

7. Describe the Truth-in-Lending Act.

Optional Learning Activities:

1. Take a field trip to a credit bureau or credit collection agency to determine their records, reporting and credit collection policies; or invite a local businessperson to visit the class and explain the company's credit policy and procedures.

2. Compare the needs for operating capital on a farm in 1981 as opposed to ten years ago and twenty years ago. Discuss the implications for customer credit needs in an agricultural supplies and services business. Have students construct a chart or bulletin board showing the operating capital requirements of a typical farm over a year's period. Show cash flow, and indicate period of time and amount of borrowed capital necessary to meet needs.

3. Have students develop a procedure which may be used for collection of a bill; discuss accounts receivable collection procedures; role play a salesperson attempting to collect an unpaid account from a past or present customer; have students write credit collection letters.

4. Develop vocabulary and spelling exercises using blank forms (ACT-12, ACT-13, and ACT-14).

WHY DO PEOPLE BUY ON CREDIT?

Below are listed 10 items frequently used by most people.

- pencils
- postage stamps
- automobiles
- refrigerators
- groceries
- houses
- television sets
- newspapers
- ice cream sodas
- shoes

1. Which items are commonly sold on credit? Why?

2. Which items are commonly sold for cash? Why?

3. List some agricultural supplies which are commonly sold on credit.

4. List some reasons why a farmer would find it advantageous to buy these agricultural supplies on credit.

5. What do you suppose would happen if all agricultural supply businesses required their customers to pay cash for everything?

WHAT IS A CREDIT POLICY?

A POLICY is a definite plan of action selected in light of given conditions to guide and determine present and future decisions. Policy comes from the same root as police. You can think of a policy as being a "police officer" that keeps your actions and decisions in line with your goals and prevents you from making decisions which would keep you from reaching your goals. An agricultural business should have a sound credit policy that determines all decisions on extending credit to customers. Since the goal of a business is to derive an income from the sales of goods or services, the credit policy needs to be compatible with making a profit.

1. Could extending credit to customers interfere with the goal of a business? Explain.

2. How could a business be reasonably sure that the credit extended to customers will be paid back?

3. Should there be a time limit on when the debt will be paid? Explain.

4. Should there be some sort of written agreement concerning repayment? Why?

5. Joe Jones is employed at a lumber yard. His best friend, Mike, comes in one day and wants to charge $400.00 worth of lumber and building supplies because he is renovating an old barn. Joe explains to Mike that the company policy requires that a customer's credit rating be established and some papers signed before the merchandise can be charged. Mike is in a hurry and wants the supplies right now, so he says to Joe, "Joe, you know you can trust me. Just send me a bill. I haven't got time for all that paperwork." What should Joe do?

THE SIX C'S OF CREDIT

Credit is a promise to pay at a future time for something of value that is received now. A business assumes a certain amount of risk in extending credit to customers and a customer must provide some proof to the business that the debt will be paid in due time. Choose from the list of words below to fill in the missing words in the sentences.

Credit rating
Conditions
Cash
Collections
Collateral
Character

Charges
Charge account
Common sense
Capacity
Customer
Capital

Consumption
Calculation
Company
Cooperation

1. ______________________________ describes a customer's honesty, sincere attitude and reputation for paying debts, and general moral qualities.

2. ______________________________ is a customer's ability to earn money to repay the debt.

3. ______________________________ is the total of a customer's possessions of value; a customer should own more than the amount of the debt.

4. ______________________________ are agreements between the lender and the borrower such as time of payment and amount of interest.

5. ______________________________ are possessions of the customer set aside or pledged as security for the debt. If the debt is not paid, these become the property of the lender.

6. ____________________ ____________________ is the ability to use credit wisely.

THE SIX C'S OF CREDIT

Credit is a promise to pay at a future time for something of value that is received now. A business assumes a certain amount of risk in extending credit to customers and a customer must provide some proof to the business that the debt will be paid in due time. Choose from the list of words below to fill in the missing words in the sentences.

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Conditions
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Collateral
Character

Charges
Charge account
Common sense
Capacity
Customer
Capital

Consumption
Calculation
Company
Cooperation

1. CHARACTER ______ describes a customer's honesty, sincere attitude and reputation for paying debts, and general moral qualities.

2. CAPACITY ______ is a customer's ability to earn money to repay the debt.

3. CAPITAL ______ is the total of a customer's possessions of value; a customer should own more than the amount of the debt.

4. CONDITIONS ______ are agreements between the lender and the borrower such as time of payment and amount of interest.

5. COLLATERAL ______ are possessions of the customer set aside or pledged as security for the debt. If the debt is not paid, these become the property of the lender.

6. COMMON ______ SENSE ______ is the ability to use credit wisely.

CREDIT IS EARNED BY:

CHARACTER

CAPACITY

CAPITAL

CONDITIONS

COLLATERAL

COMMON SENSE

CREDIT ROLE PLAYING

Use your imagination and creativity to act out the following scenes. Make up dialogue that reflects sound credit policy and the six C's of credit. Add other characters if you need them.

*1. Jack Murry operates a small grocery store. One day a stranger, Bob Evans, walks into the store and asks if he can buy a week's supply of groceries on credit. Mr. Evans says he has just moved into town and that moving expenses took all his cash. But he says that he has a good job and should be able to pay the bill in two weeks.

2. John Smith bought his soybean seed on credit ten months ago from Dependable Farm Supply, but he hasn't paid his bill yet. Mr. Smith comes into Dependable Farm Supply and wants to buy some swine feed on credit. Bill White works behind the counter and when Mr. Smith makes his request, Mr. White checks the accounts receivable records and notes the unpaid bill. While they are discussing the situation the manager, Mary Dependable, comes in.

3. Sam Jones is a high school junior who is enrolled in vocational agriculture courses. He plans to become a partner in his parent's 1,000 acre farming operation when he finishes high school. Sam wants to purchase a minicomputer as a farm management tool. He goes into the local office supply store to discuss buying the computer on credit with Ann Brown, the computer salesperson.

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*Adapted from: Teaching Source Units for Cooperative Occupational Education Related Class. 1974. University of Illinois, Urbana, Illinois.

TYPES OF CONSUMER CREDIT

Consumer credit can be either loan credit or installment credit. Explain each of the following types of credit sales plans and label each either "L" for loan credit or "I" for installment credit.

____ 1. Bill Smith has an open charge account at the local lumber yard. Every three months he goes in and settles up his account for all the materials he purchased during that time.

____ 2. Mary Jones bought a tractor from Green's Farm Implement. She made a down payment and pays some on the principal each month as well as interest charges on the unpaid balance.

____ 3. George Brown uses a bank credit card at the hardware store. He receives a bill each month showing all the purchases he made with the credit card at the hardware store as well as at other businesses. He pays some on the bill each month as well as interest charges.

____ 4. Joe Black borrowed $500.00 from the bank to buy seed corn. He agreed to pay back the entire amount in a single payment at the end of three months (plus $75.00 interest).

List other types of consumer credit. If you need help, interview a local businessperson, inquire at your bank, etc.

____

____

____

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____

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ACT-6
KEY

TYPES OF CONSUMER CREDIT

Consumer credit can be either loan credit or installment credit. Explain each of the following types of credit sales plans and label each either "L" for loan credit or "I" for installment credit.

L 1. Bill Smith has an open charge account at the local lumber yard. Every three months he goes in and settles up his account for all the materials he purchased during that time.

I 2. Mary Jones bought a tractor from Green's Farm Implement. She made a down payment and pays some on the principal each month as well as interest charges on the unpaid balance.

I 3. George Brown uses a bank credit card at the hardware store. He receives a bill each month showing all the purchases he made with the credit card at the hardware store as well as at other businesses. He pays some on the bill each month as well as interest charges.

L 4. Joe Black borrowed $500.00 from the bank to buy seed corn. He agreed to pay back the entire amount in a single payment at the end of three months (plus $75.00 interest).

List other types of consumer credit. If you need help, interview a local businessperson, inquire at your bank, etc.

e.g. Budget account; revolving charge account;mortgage; checking account with provision for savings withdrawal in case of overdraft; etc.

HOW'S YOUR CREDIT VOCABULARY

Select the word that correctly completes each sentence.

Discount
Open charge account
Interest
Budget plan
Principal
Credit limit

Conditional sales contract
Installment buying
Creditor
Finance charge
Endorser
Down payment

Mortgage
Debtor
Credit rating
Security
Uncollectible accounts
Character

1. A person who signs a note and is responsible for payment if the original borrower does not pay is known as an ____________________.
2. A ____________________ is the person who borrows and promises to pay later.
3. A ____________________ is the person who sells on credit or makes a loan.
4. A person's established reputation for paying debts on time is known as a ____________________ ____________________.
5. A ____________________ ____________________ is the amount of money that a merchant charges to cover the cost of handling a credit account.
6. ____________________ ____________________ is the method of purchasing something in which one promises to make weekly, monthly, or sometimes annual payments on it.
7. An ____________________ ____________________ ____________________ is a method of purchase whereby the seller agrees to let the buyer purchase what he/she wants during an open period and to pay in full at the end of the period.
8. The largest amount that a merchant will permit a customer to buy on credit is the ____________________ ____________________.
9. Amounts owed by customers who do not pay their bills are ______________.
10. The amount paid for the use of money is the ____________________.
11. The amount of money borrowed is the ____________________.

HOW'S YOUR CREDIT VOCABULARY

Select the word that correctly completes each sentence.

Discount
Open charge account
Interest
Budget plan
Principal
Credit limit

Conditional sales contract
Installment buying
Creditor
Finance charge
Endorser
Down payment

Mortgage
Debtor
Credit rating
Security
Uncollectible accounts
Character

1. A person who signs a note and is responsible for payment if the original borrower does not pay is known as an ENDORSER.
2. A DEBTOR is the person who borrows and promises to pay later.
3. A CREDITOR is the person who sells on credit or makes a loan.
4. A person's established reputation for paying debts on time is known as a CREDIT RATING ____.
5. A FINANCE CHARGE is the amount of money that a merchant charges to cover the cost of handling a credit account.
6. INSTALLMENT BUYING is the method of purchasing something in which one promises to make weekly, monthly, or sometimes annual payments on it.
7. An OPEN CHARGE ACCOUNT is a method of purchase whereby the seller agrees to let the buyer purchase what he/she wants during an open period and to pay in full at the end of the period.
8. The largest amount that a merchant will permit a customer to buy on credit is the CREDIT LIMIT.
9. Amounts owed by customers who do not pay their bills are UNCOLLECTIBLE ACCOUNTS.
10. The amount paid for the use of money is the INTEREST.
11. The amount of money borrowed is the PRINCIPAL.

Before you calculate the interest, circle the letter in front of the loan descriptions below which you think sound reasonable. See if you would change your mind after calculating the cost of borrowing.

*1. Calculate the cost of borrowing the following on single-payment loan:

   a. $500 at 14% interest for 20 months

   b. $1,000 at 18% interest for 6 months

2. Calculate the cost of borrowing the following on installment loan:

   a. $300 to be paid back $25.00 per month plus 15% interest on unpaid balance.

   b. $100 to be paid back at $20.00 per month for 6 months.

*Formula for single-payment loan:

Principal x Rate x Time = Interest
(in yrs.)

CALCULATING INTEREST

*1. Calculate the cost of borrowing the following on single-payment loan:

a. $500 at 14% interest for 20 months

$$\frac{\$500}{1} \times \frac{14}{100} \times \frac{20}{12} = \$116.66$$

PRINCIPAL x RATE X TIME = INTEREST

b. $1,000 at 18% interest for 6 months

$$\frac{\$1{,}000}{1} \times \frac{18}{100} \times \frac{6}{12} = \$90.00$$

2. Calculate the cost of borrowing the following on installment loan:

a. $300 to be paid back $25.00 per month plus 15% interest on unpaid balance.

MONTH	UNPAID BAL	INT
1	300	45.00
2	275	41.25
3	250	37.50
4	225	33.75
5	200	30.00
6	175	26.25
7	150	22.50
8	125	18.75

*see below

b. $100 to be paid back at $20.00 per month for 6 months.

$20.00 x 6 months = $120.00

interest = $120.00 − $100.00 = $20.00

*Formula for single-payment loan:

Principal x Rate x Time = Interest

*2.(continued)

MONTH	UNPAID BAL	INT
9	100	15.00
10	75	11.25
11	50	7.50
12	25	3.75
		292.50

Why do businesses collect interest and finance charges?

To make up for loss of income from loaned capital

To cover bookkeeping expenses

To cover expenses incurred in collection procedures

TRUTH-IN-LENDING ACT

a disclosure law passed in 1968

affects all businesses which extend credit

DISCLOSES -

annual amount of dollars

annual rate of interest

total finance charge

informs of disclosure before signing

WHAT WOULD YOUR CREDIT POLICY BE?

You are the board of directors of a newly formed small business corporation which will sell fertilizers, pesticides, seeds and provide consulting services and fertilizer and pesticide application services. The business is just getting started so you have a lot of capital invested in the buildings, inventory and equipment and there are loan payments due a year from now. Your job at this meeting is to set up a sound credit policy for extending credit to your customers. Outline your policy in the space below.

KEEP THESE WORDS IN SIGHT

Cut out the words below and tape them in prominent places at home or at school where you will see them every day (e.g., on the bathroom mirror, in your locker, on your bedroom door, above your desk, on the refrigerator door, on your notebook, etc.). Write the definition on the back for words that are difficult for you.

SPELLING PO~~M~~WER IN BUSINESS TERMINOLOG~~IE~~Y

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

____

____

____

____

____

____

____

____

ASSOCIATE NEW TERMS WITH KEY WORDS

The new terms for this problem are listed below. Suggest some phrases or key words which may help you to remember the meaning of the words as they are used in business. Divide the class into small groups and have each student explain one term to the others in the group and give a key word to help in remembering the term. Use a glossary of business terms or a dictionary if you need help.

Term Think of:

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM VII - What role do filing systems play in the operation of an agricultural business?

Study Questions:

1. Why is an organized filing system important?
2. What are the characteristics of an effective filing system?
3. What are the advantages and disadvantages of the various types of filing systems?
4. How is an effective filing system designed?
5.
6.

Instructional Materials:

1. OB-VII-ACT-1, A File of Students
2. OB-VII-ACT-2, What Information do Agricultural Businesses Keep on File?
3. OB-VII-TM-3, Characteristics of an Effective Filing System
4. OB-VII-ACT-4, Which Type of Filing System is Best?
5. OB-VII-ACT-5, How Would You Choose a Filing System?
6. OB-VII-ACT-6, Designing a Filing System
7. OB-VII-ACT-7, Why are Filing Systems Important?

Interest Approach: Have students organize themselves into a "file" (ACT-1). Then discuss the meaning of the word "file" and why filing systems are used.

Learning Activities:

1. Have students complete ACT-2 to explore types of information that agricultural businesses keep on file.
2. View TM-3 explaining the characteristics of an effective filing system. Have students give examples illustrating why each characteristic would be important.

3. Collect brochures from an office supply store on filing systems, types of containers available, computerized filing systems, etc. and have students use these to complete the comparison chart (ACT-4). Then assess the filing systems using the discussion questions in ACT-5.

4. Give students practice in designing and implementing a filing system with ACT-6. This can be done as a class project, individual project, or small group project.

5. Make a sheet of fill-in-the-blanks or questions which will require students to work with a filing system to find the answers. Use the Ag-dex system if your school has one or the card catalog in the school library.

Conclusion: Have students write a short essay on the importance of organized filing system in an agricultural business (ACT-7).

Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of keeping an organized filing system in an agricultural business.
2. Describe the characteristics of an effective filing system.
3. Assess the advantages and disadvantages of the various types of filing systems.
4. Accurately file and retrieve materials in a filing system.
5. Design a filing system.
6.

Optional Learning Activities:

1. Take a field trip to a local office supply store or bring someone from the office supply store into the classroom to explain various types of filing materials and filing systems.

2. Take a "field trip" to the school's main office and have the secretary explain the school's filing system.

3. Use blank forms (ACT-8, ACT-9, ACT-10) to develop vocabulary building exercises for words and terms in this problem area. (This might be a good problem area to introduce computer terminology.)

A FILE OF STUDENTS

Ask one student to identify someone in the classroom who was born in a certain month (e.g., January, 1965) and whose middle initial is a certain letter (e.g., "C"). Be sure to select a combination that you know does not exist in the class. Do not allow the student to ask questions of his or her classmates. Tell the students you will help them answer the question simply by rearranging their position in the classroom.

Divide the class into two groups. The first group should be instructed to line up alphabetically by their middle initials and the second group should line up by birthdate. Provide each group with cards and a felt-tip pen and have them label the major divisions in their groups (e.g., A, B, C, etc.; and January, 1965, February, 1965, etc.). The first student in each division should hold the card.

Ask the students in the alphabetical group to identify someone in the birthdate group who was born in a certain month of a certain year. Ask the students in the alphabetical group to identify someone whose middle name begins with a certain letter.

Instruct the alphabetical group and the birthdate group to merge so that they are lined up by birthdate and within each birthdate group are alphabetical by middle initial. Students will probably need to make additional division cards.

Now ask the students to identify someone who fits the description in your original question. They should be able to readily answer that no one in the class fits that description. Next ask students to identify several combinations of birthdates and middle initials that exist in the group. Ask students to explain why they could easily identify these students after they lined up but not before. When the students have returned to their seats, write the word "FILE" on the board and ask the students to define the word and explain why things are filed.

WHAT INFORMATION DO AGRICULTURAL BUSINESSES KEEP ON FILE?

Some situations in which filing systems are necessary in an agricultural business are described below. After reading each situation, list the information which should be found in the filing system and describe how the filing system is probably indexed (e.g., by customer last name, by social security number, by department, etc.).

SITUATION 1: Alice Jones manages a fertilizer supply business. John Smith comes into the office to discuss his fertilizer needs for the upcoming growing season. Ms. Jones goes to the customer file to pull Mr. Smith's file folder. What information should be found in this file? ______________________________

____

How is the file probably indexed? ______________________________

FARM SUPPLY

SITUATION 2: Mr. Johnson is interested in using Aatrex Nine-O^{TM} this year rather than liquid atrazine because he saw it advertised on TV. However, he has several questions he wants answered before he makes a final decision. Mr. Johnson calls Mr. Brown at the local farm supply outlet. After listening to Mr. Johnson's request, Mr. Brown immediately goes to the product information file. What information should be found in this file?

____

____

How is the file probably indexed? ______________________________

SITUATION 3: Bill White is employed by a lawn and garden supply store. His wife just had a baby and he wants to include his new daughter in his insurance coverage and add the baby as a dependent on his withholding form. Mr. White goes to the company secretary who pulls his records from the personnel files. What information should be found in this file? ______________________________

____

How is the file probably indexed? ______________________________

SITUATION 4: Mary Green is getting ready for the planting season and needs some replacement parts for her corn planter. She calls Bob Jones at the farm implement dealership. Mr. Jones is not sure if he has those particular parts in stock so he goes to the CRT terminal and instructs the computer to display the inventory file. What information should be found in this file? ______________________

____

How is the file probably indexed? ______________________________

Can you think of other information which an agricultural business would need to keep in a filing system? List as many types of information as you can. ______________________________

____

____

WHAT INFORMATION DO AGRICULTURAL BUSINESSES KEEP ON FILE?

Some situations in which filing systems are necessary in an agricultural business are described below. After reading each situation, list the information which should be found in the filing system and describe how the filing system is probably indexed (e.g., by customer last name, by social security number, by department, etc.).

SITUATION 1: Alice Jones manages a fertilizer supply business. John Smith comes into the office to discuss his fertilizer needs for the upcoming growing season. Ms. Jones goes to the customer file to pull Mr. Smith's file folder. What information should be found in this file? Soil map of customer's farm, records of previous seasons' fertilizer and pesticide applications, comments on special problems, location of farm for delivery scheduling, dates and records of soil tests, etc.

How is the file probably indexed? by customer last name

FARM SUPPLY

SITUATION 2: Mr. Johnson is interested in using Aatrex Nine-O™ this year rather than liquid atrazine because he saw it advertised on TV. However, he has several questions he wants answered before he makes a final decision. Mr. Johnson calls Mr. Brown at the local farm supply outlet. After listening to Mr. Johnson's request, Mr. Brown immediately goes to the product information file. What information should be found in this file?

facsimile of product label, manufacturer's brochures, application rate and calibration information, any special handling or storage instructions, etc.

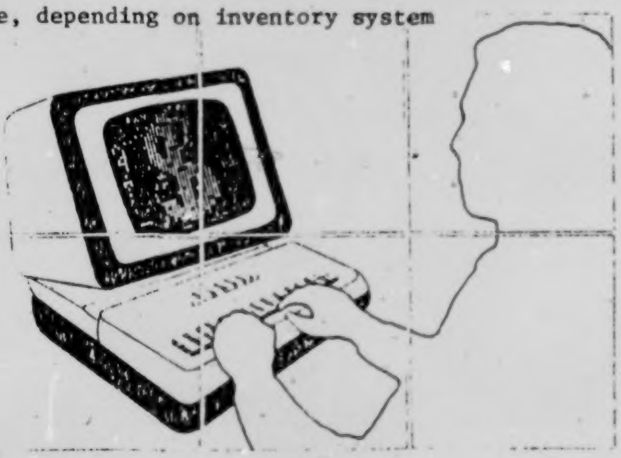
How is the file probably indexed? by product type (e.g. herbicides, insecticides) with subdivisions alphabetically by manufacturer or product name, with sub-subdivisions by brand name for often referenced information

SITUATION 3: Bill White is employed by a lawn and garden supply store. His wife just had a baby and he wants to include his new daughter in his insurance coverage and add the baby as a dependent on his withholding form. Mr. White goes to the company secretary who pulls his records from the personnel files. What information should be found in this file? biographical data on employee, wage and salary information, employment record, tax forms, insurance forms, etc.

How is the file probably indexed? by employee last name

SITUATION 4: Mary Green is getting ready for the planting season and needs some replacement parts for her corn planter. She calls Bob Jones at the farm implement dealership. Mr. Jones is not sure if he has those particular parts in stock so he goes to the CRT terminal and instructs the computer to display the inventory file. What information should be found in this file? part name and stock number, number on hand, number on order, condition, date of orders, expected delivery date on order items, comments or special remarks, etc.

How is the file probably indexed? ~~by manufacturer model number, by st~~ock number by part type, depending on inventory system

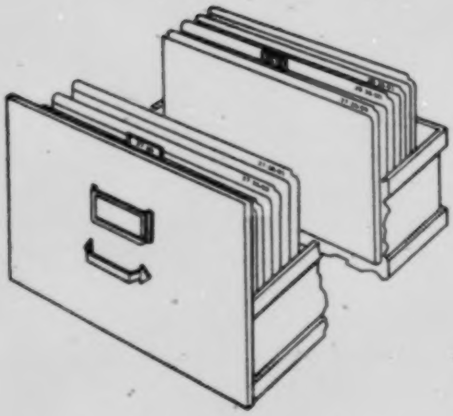


Can you think of other information which an agricultural business would need to keep in a filing system? List as many types of information as you can. Payroll, purchase orders, invoices, accounts receivable, charge accounts and credit ratings of customers, information on products sold by competitors, extension bulletins and other reference materials, etc.

CHARACTERISTICS OF AN EFFECTIVE FILING SYSTEM

AN EFFECTIVE FILING SYSTEM WILL PROVIDE FOR:

1. **Easy Accessibility**
2. **Permanence**
3. **Safeguards against misfiling**
4. **Speed of retrieval**
5. **Neatness**
6. **Logical Indexing**
7. **Easy Expansion**



WHICH TYPE OF FILING SYSTEM IS BEST?

Use brochures from an office supply store or a text book on filing to complete the following chart.

TYPE OF FILING SYSTEM / CHARACTERISTICS	Notebooks or Folders on Shelves	Color Coded Hanging Files in File Drawers	Manilla Folders in Cardboard Boxes	Computer Disk System with CRT Unit & Printer
Accessibility				
Permanence				
Safeguards Against Misfiling				
Speed of Retrieval				
Neatness				
Easy Expansion				
Cost (rate from 1-4; 1 = least expensive, 4 = most				

KEY

WHICH TYPE OF FILING SYSTEM IS BEST?

Use brochures from an office supply store or a text book on filing to complete the following chart.

TYPE OF FILING SYSTEM / CHARACTERISTICS	Notebooks or Folders on Shelves	Color Coded Hanging Files in File Drawers	Manilla Folders in Cardboard Boxes	Computer Disk System with CRT Unit & Printer
Accessibility	Top and bottom shelves may may be hard to reach	Easily Accessible	May be difficult to access if boxes have lids and are stacked	If only one terminal may be difficult for more than one to use file at a time
Permanence	May not be fireproof	filing cabinet may be fire-proof, better protected than on shelves	Files may be subject to fire or moisture damage, boxes could deteriotate	Need a backup disk system but doesn't take up a lot of space
Safeguards Against Misfiling	Usually none provided with this sort of file but could be color coded	Color codes allow immediate detection of misfile	Usually none provided with this type of filing system	safeguards can be programmed in for entry; info never leaves computer when accessed so if entered correctly it remains correct
Speed of Retrieval	Fairly quick access possible	If person knows color code well can be accessed very quickly	Could be slow if boxes have lids and are stacked	Extremely quick access
Neatness	Notebooks easier to keep neat, could get messy	Hanging files keep drawers neat looking	Could appear neat on out-side and be messy inside	Usually a computer room or area is very neat but area could get cluttered
Easy Expansion	May need to build more shelves but space is only limit	May need to purchase more more cabinets but space is only limit	Again space would be only limit	Offers easy expansion - can add another disk to file, more memory, more CRTs more printers, etc.
Cost (rate from 1-4; 1 = least expensive, 4 = most	2	3	1	4

HOW WOULD YOU CHOOSE A FILING SYSTEM?

(Questions for Discussion)

Consider the four types of filing systems you compared in ACT-4. If you owned an agrichemicals supply store, which filing system would you choose? Would your decision be different if you owned a large seed corn company?

Why would you choose one filing system before another?

What criteria would be most important to you?

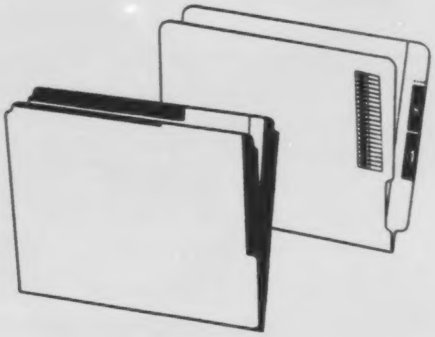
Where would you get advice on designing your filing system?

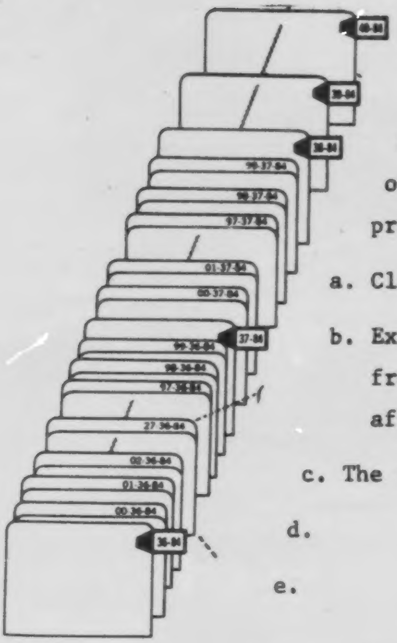
What benefits does color-coding give to a filing system?

Why might easy expansion of your files be important?

Would it be necessary to have fireproof files?

How would you decide how much you could afford to spend on a filing system?

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DESIGNING A FILING SYSTEM

Design and implement a filing system for one of the following suggested types of information or suggest your own proposed set of information to file.

a. Class notes

b. Extension bulletins and important handouts from class which you will want to reference after you graduate

c. The records of your FFA chapter

d.

e.

Remember to choose the major division wisely: too many divisions are as difficult to work with as too few. Use subdivision if you want. Think of all the different ways you could divide the material (e.g., by date, by alphabet, by number system, by subject, etc.) before you make a final decision on your index.

WHY ARE FILING SYSTEMS IMPORTANT?

Now that you have studied some aspects of filing systems, you should have an opinion on the role they play in an agricultural business. Write a short essay explaining in your words why filing systems are important in the operation of an agricultural business. Be sure to include examples to illustrate your major points.

KEEP THESE WORDS IN SIGHT

Cut out the words below and tape them in prominent places at home or at school where you will see them every day (e.g., on the bathroom mirror, in your locker, on your bedroom door, above your desk, on the refrigerator door, on your notebook, etc.). Write the definition on the back for words that are difficult for you.

SPELLING POWER IN BUSINESS TERMINOLOGY

Circle the business terms in the lefthand column that are misspelled. Write all the terms correctly in the righthand column.

____

____

____

____

____

____

____

____

ASSOCIATE NEW TERMS WITH KEY WORDS

The new terms for this problem are listed below. Suggest some phrases or key words which may help you to remember the meaning of the words as they are used in business. Divide the class into small groups and have each student explain one term to the others in the group and give a key word to help in remembering the term. Use a glossary of business terms or a dictionary if you need help.

Term	Think of:

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM VIII- How does a company advertise to perspective customers what agricultural supplies and services it has to offer?

Study Questions:

1. What is the purpose of advertising?
2. What are the advantages and disadvantages of each type of advertising?
3. How are the principles of customer motivation used in preparing advertising copy and layouts?
4. How is an advertising budget planned?
5. How is an advertising calendar planned?
6.

Reference and Materials:

1. McGuire, James E., 1979. Advertising and Display in Agribusiness. McGraw-Hill Book Company, New York.
2. Gibson, Terry and Trisha Day, 1976. Appeals. University of Wisconsin Extension Service.

Interest Approach: Bring some advertisements of agricultural products to class (or have students each bring one). Evaluate each ad as to its effectiveness, message, attention getter, use of illustrations, use of motivation words, etc.

Learning Activities:

1. Ask students to explain why advertising is necessary to agricultural business. View TM-1. Have students list all the different communication media used in advertising. View TM-2. Have students give examples of each that they have seen or heard.
2. Ask students what things motivate customers to buy agricultural products. Discuss how advertising appeals to many needs and desires. View TM-3. Review some of the ads evaluated in the

interest approach and have students look for appeals to various needs and desires.

3. Have students contact local newspaper, radio and TV station, if applicable, to obtain published rate cards. Compare costs of advertising in these media. Complete ACT-4 as a class or in small groups.

4. Give students practice in preparing advertisements with ACT-5 and ACT-6. Students can work in teams for these activities. The art instructor at your school may be used as a resource person. Students could also prepare a layout of a newspaper ad.

5. Assist students in preparing an advertising budget and advertising calendar for a hypothetical agricultural business.

Conclusion: View TM-1 again and have students give an example of an ad that informs, one that persuades, and one that reminds.

Evaluation: As a result of this lesson, students should be able to:

1. Discuss the purposes of advertising.
2. Calculate the costs of different kinds of advertising.
3. Compare newspapers, radio, television, magazines, billboards, direct mail and promotional items as to effectiveness, advantages and disadvantages.
4. Recognize the principles of customer motivation as they are used in preparing advertising.
5. Plan an advertising budget and an advertising calendar.
6. Prepare a newspaper ad and a radio spot and design a direct mail folder.
7.

Optional Learning Activities:

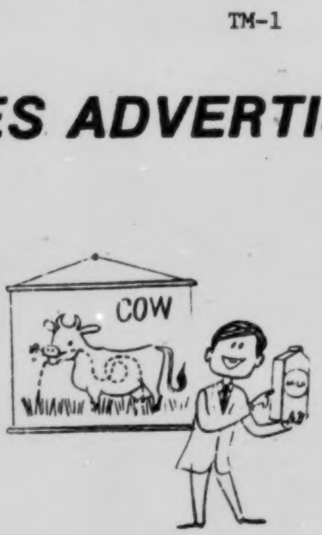
1. If videotape equipment is available at your school, have students design and produce a television advertisement. This could promote an FFA activity, school activity, etc.
2. Take a field trip to the advertising department of a newspaper or radio station. Have students write reports on the trip on the value of advertising, the costs involved, returns expected, and what constitutes an effective advertisement.

3. Students make a sample layout of a newspaper ad for a local retailer, advertising an item used in agriculture and present it to the retailer for evaluation.

4. Prepare a sample advertisement for an FFA fund-raising program.

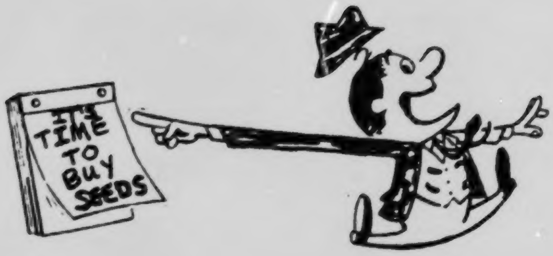
WHY DO BUSINESSES ADVERTISE

TO INFORM



TO PERSUADE

TO REMIND


IT'S
TIME
TO
BUY
SEEDS

ADVERTISING - promotion of a product, supply, or service through the communication media

WHERE DO BUSINESSES ADVERTISE?

in newspapers

in magazines

on the radio

on television

in direct mail pieces

ACME FARM SERVICE

on novelty items

on billboards and signs

ADVERTISING APPEALS TO NEEDS

DESIRE FOR SUCCESS

HOME AND FAMILY

HEALTH

CONVENIENCE

PRAISE

PROTECTION FROM DANGER

PROFIT MOTIVE

CURIOSITY

MENTAL STIMULATION

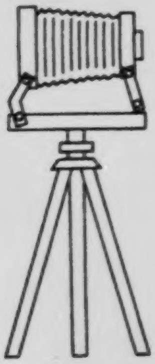
PHYSICAL COMFORT

SENSORY STIMULATION

COMPARING ADVERTISING MEDIA

Describe some advantages and disadvantages of advertising in the media listed below.

	Advantages	Disadvantages
Newspaper		
Magazine		
Direct Mail Piece		
Radio		
Television		
Billboards & Signs		
Promotional Items		



PREPARING RADIO ADVERTISING

Choose an agricultural product that you would like to advertise on the radio and then follow the steps outlined below and write the copy for a 30 second radio spot advertisement. (About 30 words of copy maximum!)

Product ____

Attention Getter ______________________________________

____

What response or action is desired from the listener? __________

____

What picture words can you use to describe the product? ________

____

Now write the copy for a radio announcement in the space below:

____

____

____

____

____

____

____

____

PREPARING A DIRECT MAIL FLIER

Planning is very important in preparing a direct mail flier. You should answer the following questions before you begin.

1. What message do I want the direct mail flier to convey?
2. How do I want to say it? (The copy you write should be concise, accurate, come to the point quickly, appeal to the reader's self-interest, and end with a call for action.)
3. What do I want to illustrate or show? (The illustrations should complement your written message.)
4. What format to I want? (Direct mail can be in the form of a letter, post card, brochure, poster, novelty items, product samples, etc.)
5. Who am I going to send it to? (Past, present or potential customers?)
6. How am I going to send it? (Check with the Postal Service to help decide if you want bulk rate or first class, to see if there are size requirements, differences in delivery time, price differences, etc.)

Keeping these planning questions in mind, prepare a direct mail flier for one of the following situations, or think of one you would like to do yourself.

1. You work for a seed company and want to announce an open house and field day with demonstration plots of new corn hybrids and soybean varieties.
2. You work for a farm supply store and want to introduce and promote a new animal health product.
3. You work at a garden supply center and want to remind people that it is time to get ready for spring planting and to inform them of all the supplies you have available for gardening.

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM IX - What do I need to know about displaying agricultural merchanise in the store?

Study Questions:

1. Why is merchandise display important?
2. What are the elements of an effective display?
3. How is a display designed, set up and maintained?
4.
5.
6.

References and Materials:

1. McGuire, James E., 1979. Advertising and Display in Agribusiness. McGraw-Hill Book Company, New York.
2. Gibson, Terry and Trisha Day, 1976. Appeals. University of Wisconsin - Extension.
3. OB-IX-TM-1, Elements of an Effective Display
4. OB-IX-ACT-2, Merchandise Display Scavenger Hunt
5. OB-IX-TM-3, AIDA Formula
6. OB-IX-ACT-4, Assessing Displays

Interest Approach: Bring empty cartons, boxes, bags and cans of agricultural products to class (or use books and magazines in the classroom). Provide cards and felt-tip pens. Divide the class into two groups. Instruct one group to construct what they consider to be an effective display. Instruct the other group to construct the worst possible display they can. Have students from first group list on the blackboard what they did "right" and students from the second group list all the things they did "wrong". Compare the displays and discuss the lists.

Learning Activities:

1. Explain that merchandise display is one technique for promoting a product, service, idea, etc. A display presents or shows something near the point of purchase. View TM-1 and discuss the elements of an effective display.

2. Explain the various types of displays listed in ACT-2, then challenge students to complete the scavenger hunt (ACT-2). If possible, offer a prize for the winner. To break a tie, give extra points to the person who found the most agricultural displays.

3. View TM-3, the AIDA formula for effective promotion. Have students complete ACT-4, assessing one of the displays they observed in the scavenger hunt.

Conclusion: Have students design and construct an effective display for a local FFA chapter activity.

Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of properly displaying merchandise.
2. Evaluate the elements of an effective display.
3. Describe display materials.
4. Describe the various types of agricultural display.
5. Design, construct and maintain an effective display.

Optional Learning Activities:

1. Incorporate display assessment within a scheduled field trip to the Annual Fertilizer and Agrichemical Dealers Convention, the Farm Progress Show, the state fair, FFA Convention, Veishea, etc., where students can view many professional displays. Challenge the students to critically assess and/or classify some displays as part of their activities during the convention or show.

2. Students photograph desirable business displays and place in notebook with descriptions of these displays, or take slides for presentation to class.

ELEMENTS OF AN EFFECTIVE DISPLAY

CLEANLINESS

BALANCE

COLOR HARMONY

SIMPLICITY

DRAMATIZATION

CLEAR PRICE IDENTIFICATION

PROVISION FOR RELATED SELLING

MERCHANDISE DISPLAY SCAVENGER HUNT

Your assignment is to locate an example of as many of the following types of displays and display arrangements as you can in your community. See if you can be the first to complete the list and win the "scavenger hunt". (Include information about each display as indicated in #1.)

1. Window Display

   Name of Business ______________________________

   ____

   Product(s) Being Displayed ______________________________

   ____

   Brief Description of Display ______________________________

   ____

   ____

2. Wall Display
3. Pyramid Arrangement
4. Open Area Display
5. Stairstep Arrangement
6. Seasonal Display
7. Shadow Box Display
8. Interference Arrangement
9. Display Using Motion for Attention
10. Closed Case Display
11. Display Allowing Customer Selection of Products in Display

Follow the AIDA formula

get people's

Attention

keep their

Interest

appeal to a

Desire

suggest a course of

Action

USE PESTICIDES SAFELY

ASSESSING DISPLAYS

Choose one of the displays you observed in completing ACT-2 which you thought was particularly effective. Assess this display using the following questions:

1. How did the display capture your attention?

____

____

2. How did the display hold your interest?

____

____

3. To which of your desires did the display appeal?

____

____

4. What course of action did the display suggest?

____

____

5. How was price indicated?

____

____

6. What colors were used in the display?

____

____

7. Make several suggestions for improving this display.

____

____

____

____

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM X - What do I need to know about how a business manager keeps track of all the money coming into and going out of the business?

Study Questions:

1. What is double entry bookkeeping?
2. How do income and expenses fit into the bookkeeping system?
3. How are entries made in "T" accounts?
4. How are the balance sheet and the income statement prepared?
5. How are entries made in the general journal and ledger?
6. What is a trial balance and how is it prepared?
7. How is the ledger closed?
8. How are entries made in the various account journals and ledgers?
9. How are computerized bookkeeping systems organized?
10.

References and Materials:

1.

2.

3.

Evaluation: As a result of this lesson, students should be able to:

1. Apply the principles of double entry bookkeeping.
2. Recognize the effect of income and expenses in the bookkeeping system.
3. Enter assets, liabilities and owner's equity in "T" accounts.
4. Enter income and expense accounts.

5. Complete entries in the balance sheet and in the income statement.

6. Make entries in the general journal and ledger.

7. Prepare a trial balance.

8. Close the ledger.

9. Apply bookkeeping procedures by making the appropriate entries in the sales journal, purchases journal, cash receipts journal, cash disbursements journal, accounts receivable ledger, and accounts payable ledger.

10. Describe how entries are made in a computerized bookkeeping system and interpret output from a computerized system.

Optional Learning Activities:

1. Students use sample problems and make bookkeeping entries appropriate to the competencies listed.

2. Note: This is a very demanding problem area and the teacher should either plan to spend at least 36 hours on this problem area or not do it at all. This problem area could probably be taught through the business department courses.

UNIT: ORGANIZATION AND OPERATION OF AGRICULTURAL BUSINESSES

PROBLEM XI - How can I utilize my time on the job most efficiently and productively?

Study Questions:

1. What is time management?
2. What is meant by work simplification?
3. What kinds of charts and schedules can help me study my job requirements and work efficiency?
4. When is labor-saving equipment profitable to use?
5.
6.

References and Materials:

1.
2.
3.

Interest Approach: Have students begin ACT-1, Things To Do This Week. Discuss how planning and organization can help to improve efficiency both on the job and during leisure hours. Discuss ways in which a person can get more out of each day by managing time effectively: planning ahead, making lists of things to do, setting deadlines for task completion, finish something once it is started, take advantage of peak periods (usually morning hours) for difficult tasks, consolidate trips, communicate clearly, do things correctly the first time - get the directions straight before you begin a job, take a break if you need one, be conscious of time wasting habits, etc.

Evaluation: As a result of this lesson, students should be able to:

1. Efficiently manage time on the job.
2. Explain the work simplification procedure.
3. Analyze the charts and aids which can be used for studying time and labor on the job.
4. Calculate a partial budget to determine the point of increased returns when it pays to invest in labor-saving equipment.

Optional Learning Activities:

1. Students estimate through class discussion, the time wasted through employee meaningless conversation during an eight-hour day. Have students calculate the "value of a minute" and the "value of an hour" for different salaries or rates of pay based on a 2000 hour year (fifty, 40-hour weeks).
2. Students prepare a time and labor study of one person on a farm or in a farm supply center for a one-day or one-week period.
3. Students organize a one-day or one-week work schedule for themselves on the job, or for an employee in a farm supply occupation.
4. Students list labor-saving equipment they have used on the farm, in the shop, in the kitchen, in school, at home, etc. Discuss possibilities for labor-saving equipment in agricultural supplies and services occupations and when it pays to invest in these.

THINGS TO DO THIS WEEK

A helpful tool in making the most of your time is to write up a list of things to do and check them off as you complete each task or activity. Make a list of the things you want to do next week (include work, study, home chores, recreation, etc.). Refer to your list each day and follow up at the end of the week by examining the things you accomplished and didn't accomplish. If you didn't finish everything, ask yourself why. Did you procrastinate, schedule too much, forget, start something but not follow through, get delayed by someone else, etc.?

THINGS TO DO

___/___/___ through ___/___/___

Finished ✓

Monday

1. ______________________________ ____
2. ______________________________ ____
3. ______________________________ ____

Tuesday

1. ______________________________ ____
2. ______________________________ ____
3. ______________________________ ____

Wednesday

1. ______________________________ ____
2. ______________________________ ____
3. ______________________________ ____

Thursday

1. ______________________________ ____
2. ______________________________ ____
3. ______________________________ ____

Friday

1. ______________________________ ____
2. ______________________________ ____
3. ______________________________ ____

UNIT: PRODUCT KNOWLEDGE OF AGRICULTURAL SUPPLIES (PK)

Problem Areas Included:

PK-I. What types of things do I need to know about the products I work with?

PK-II. What specific product knowledge will I need for the job I want?

References used in this unit:

1. Dillon, Roy. 1979. Working with animal supplies and services. McGraw-Hill Book Company, New York.

2. Farrington, William S., Clyde F. Sartor, Paul W. Vaughn and Ronald A. Brown. 1979. Working with plant supplies and services. McGraw-Hill Book Company, New York.

3. Iowa Curriculum Guides. 1973. Agronomic Sciences; Animal Science; Agricultural Mechanics; and Agricultural Products Processing and Distribution. Department of Agricultural Education, Iowa State University and the Iowa Department of Public Instruction.

4. McClay, David R. 1978. Identifying and validating essential competencies needed for entry and advancement in major agriculture and agribusiness occupations. U.S. Department of Health, Education and Welfare, U.S. Government Printing Office, Washington, D.C.

5. Vocational Agriculture Service, University of Illinois-Urbana. c1979. Product Knowledge (slide film with study guide and cassette).

UNIT: PRODUCT KNOWLEDGE OF AGRICULTURAL SUPPLIES

PROBLEM I - What types of things do I need to know about the products I work with?

Study Questions:

1. Why is product knowledge important in serving the customers?
2. Why is product knowledge important in handling and storage?
3. Why is product knowledge important in managing a business?
4.
5.
6.

References and Materials:

1. PK-I-ACT-1, Why is product knowledge important?
2. PK-I-TM-2, Product knowledge: a key to successful sales.
3. PK-I-INFO-3, What do I need to know about the products in serving the customer?
4. PK-I-ACT-4, Product knowledge in action.
5. PK-I-INFO-5, What do I need to know about the products when storing and handling them?
6. PK-I-TM-6, Product knowledge is important in making management decisions.

Interest Approach: Students complete ACT-1. Discuss the importance of product knowledge - ask students if they can think of any other reasons why knowing the products you sell could be advantageous.

Learning Activities:

1. Discuss the importance of product knowledge in serving the customer using TM-2. Have students read INFO-3 and then practice using product knowledge in sales by role playing the scenes in ACT-4. (Divide class into 4 groups and give them 5 or 10 minutes to prepare their respective skits.)
2. Discuss the importance of product knowledge in storage and handling. Begin by asking students what they do with a

gallon of ice cream when they bring it home from the grocery store. Would they buy the ice cream in the morning before school and then leave it in the car and take it home after school? Have them explain why. Ask students to explain why there are "No Smoking" signs at every gas station. Then read INFO-5.

3. Ask students to explain how product knowledge could be important in making management decisions about:

   purchasing inventory
   designing & maintaining storage buildings
   purchasing equipment
   advertising & promotion
   delivery schedules
   pricing

   View TM-6.

Conclusion: Have each student put together a product information folder for an agricultural product of their choice. Each student could give a short report on his or her product or the class could use these to make a display or bulletin board in the classroom.

Evaluation: As a result of this lesson, students should be able to:

1. Explain the importance of product knowledge.
2. Describe aspects of product knowledge which help to better serve the customers.
3. Describe aspects of product knowledge which are essential for safe and efficient handling and storage.
4. Describe aspects of product knowledge which are important in managing a business.
5.
6.

Optional Learning Activities:

1. Take a field trip to an agricultural business and have students compile a list of all the ways in which product knowledge is used in that business. Have the owner or manager explain how product information is filed and obtained.

WHY IS PRODUCT KNOWLEDGE IMPORTANT?

Fill in the missing words in the following sentences and phrases.

Product knowledge:

allows salesperson to match P _ _ _ _ _ _ to customer needs,

enhances the R _ _ _ _ _ _ _ _ _ of the business for reliability,

allows the salesperson to O _ _ _ _ extra advisory services,

helps the salesperson to present product D _ _ _ _ _ _ _ _ _ _ _ _ _ which help sell the product,

shows that the salesperson has an U _ _ _ _ _ _ _ _ _ _ _ _ of the customer's needs,

helps to insure C _ _ _ _ _ _ _ satisfaction.

in the long run, results in savings of T _ _ _ and money for the customer and the business,

is an important K _ _ to successful sales,

helps salesperson to work with N _ complaints,

aids in selecting and O _ _ _ _ _ _ _ inventory stock,

helps business W _ _ customer confidence,

is necessary for compliance with L _ _ _ _ requirements of storage handling,

because it results in satisfied customers, E _ _ _ _ _ _ _ _ _ repeat business,

can be an aid in making management D _ _ _ _ _ _ _ _ ,

is important in G _ _ _ _ _ salespeople confidence,

and helps to E _ _ _ _ _ _ _ _ mistakes in all aspects of the business.

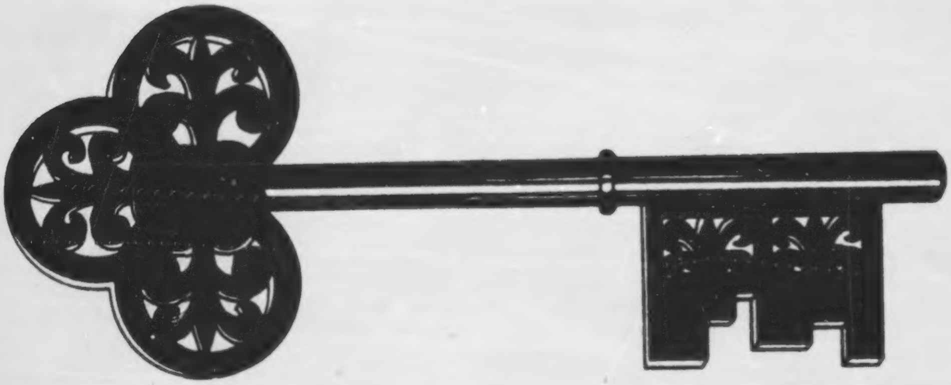
WHY IS PRODUCT KNOWLEDGE IMPORTANT?

P roduct to customer's need
R eputation
O ffer extra advisory services
D emonstrations
U nderstanding
C ustomer satisfaction
T ime

K ey to successful sales
N o complaints
O rdering inventory
W in customer confidence
L egal requirements
E ncourages repeat business
D ecisions
G iving salespeople confidence
E liminate mistakes

PRODUCT KNOWLEDGE:

a KEY to successful sales



1. helps you match the product to the customer's need

2. helps to insure customer satisfaction

3. minimizes occurance of complaints

4. allows you to answer questions

5. encourages repeat business

6. helps you maintain credibilty

WHAT DO I NEED TO KNOW ABOUT THE PRODUCTS IN SERVING THE CUSTOMER?

To be successful in selling agricultural supplies, you should know:

1. What the product does and doesn't do.
2. The recommended use of the product.
3. Proper procedures for using the product.
4. Any precautions or special characteristics.
5. Why one product is better than another.
6. Cost of product and price comparisons.
7. What returns customer can expect from purchasing and using the product.

PRODUCT KNOWLEDGE IN ACTION

Act out the following scenes and try to include all the points listed in INFO-3 in your dialogue. One student should play the role of the customer and one or more students can play the role of personnel in the business establishment. Be sure as a salesperson to ask all the questions necessary to allow you to give the customer sound advice.

1. Jim Brown has a problem with corn rootworms in a field which has been in corn for the past two years. He has used Furadan for the last two seasons but with poor results last year. He wants to plant corn in the field again this year and has come into your agrichemicals store for advice in purchasing an insecticide for this season.

2. Mary Smith is just starting out in a swine operation. She has come into your feed store to order feed for the operation and wants advice on the proper rations to purchase.

3. John White comes into your farm implement and parts store and wants to buy some rotary spray nozzles for an old sprayer he has because he read in a farm magazine that the rotary nozzles were pretty good.

4. Joe Green is building a new farrowing house and comes into your farm supply store to select some flooring for the farrowing stalls.

WHAT DO I NEED TO KNOW ABOUT THE PRODUCTS WHEN STORING AND HANDLING THEM?

When storing and handling agricultural supplies, you should know:

1. What things may cause the product to deteriorate or become dangerous.
    a. Temperature requirements for storage.
    b. Moisture requirements for storage.
    c. Ventilation requirements for storage.
    d. Legal requirements for storage.
    e. Shelf life.
    f. Pest control for storage.

2. Any safety precautions necessary in handling the product.
    a. If product is potentially toxic you should know how toxic, any first aid measures necessary in case of accidents, and any symptoms of poisoning.
    b. Proper procedures for dealing with spills.
    c. Any legal restrictions or regulations.
    d. Proper equipment and protective clothing.

USE PESTICIDES SAFELY

KNOWLEDGE OF THE PRODUCTS IS IMPORTANT FOR DECISIONS ON

Purchasing inventory

Designing and maintaining storage facilities

Purchasing equipment

Advertising and promotion

Delivery schedules

Pricing

UNIT: PRODUCT KNOWLEDGE OF AGRICULTURAL SUPPLIES

PROBLEM II: What specific product knowledge will I need for the job I want?

Study Questions:

1. What things should I know if employed in the feed and grain industry?
2. What things should I know if employed in the fertilizer and seed industry?
3. What things should I know if employed in the agricultural chemicals industry?
4. What things should I know if employed in the animal health industry?
5. What things should I know if employed in the farm equipment, hardware or lumber industry?
6. What things should I know if employed in the petroleum and petroleum products industry?
7.
8.

References and Materials:

1. McClay, David R., 1978. Identifying and validating essential competencies needed for entry and advancement in major agriculture and agribusiness occupations. U.S. Department of Health, Education and Welfare, U.S. Government Printing Office, Washington, D.C.
2. Vocational Agriculture Service, University of Illinois-Urbana, c1979. Product Knowledge (slide film with study guide and cassette).
3. Iowa Curriculum Guides: Agronomic Sciences, Animal Science, Agricultural Mechanics, and Agricultural Products Processing and Distribution. 1973. Department of Agricultural Education, Iowa State University, and the Iowa Department of Public Instruction.

Interest Approach: View slide film on Product Knowledge. Discuss with students why Product Knowledge is crucial in agricultural supplies and services occupations.

Learning Activities: Note: As it would be difficult to teach all of the subject matter of product knowledge for each individual occupation within agricultural supplies and services, and as this subject matter is covered in other vocational agriculture courses, it is suggested that this problem area be handled through a general overview approach or through individualized supervised instruction. If it is desired to teach this problem area as six separate ones, covering the subject matter for each occupational grouping in more detail than outlined below, the information sheets, INFO-1 through INFO-6, list suggested evaluation criteria which could form the basis of more detailed exploration of the topics.

1. Have students read the information sheets on the various occupational clusters within agricultural supplies and services. (INFO-1, INFO-2, INFO-3, INFO-4, INFO-5, INFO-6) Discuss why each competencies would be important in the occupational cluster for which it is described.

2. Discuss with students sources of information on products in agricultural supplies and services which they will need to utilize to expand their product knowledge and keep current of product changes and innovations after they are on the job. (Product information files in the place of business, brochures and publications from product manufacturers, product labels, magazines and farm journals, extension service publications and demonstrations, government publications from USDA, EPA, OSHA, etc., demonstrations at Farm Progress Show, state fair, industry field days, etc.) Discuss with students why it is important to have knowledge of the products sold by competitor's as well as products sold in the place of employment.

3. Have each student explore one area of product knowledge within an occupational cluster in which he or she is interested by gathering information, preparing a product information file and/or report on classroom exhibit on a limited topic within that occupational cluster. (e.g. broadleaf herbicides used in corn production; vitamin supplements for swine rations; soybean varieties for one part of Iowa; hydraulic oils for farm machinery, etc.)

Conclusion: Have students present the reports they prepared or construct an exhibit or bulletin board on product knowledge.

Evaluation: As a result of this lesson, students should be able to:

1. Describe the subject matter areas of product knowledge in which they should have competencies for entry and advancement in the various agricultural supplies and services clusters.

2. Identify sources of product information.

3. Explain the importance of product knowledge in agricultural supplies and services occupations.

Optional Learning Activities:

1. Field trips to local agricultural businesses, field days, demonstrations, etc.

2. Invite a panel of agricultural business employees and managers to discuss the importance of product knowledge, and give examples of what can happen when someone lacks knowledge of the products he or she is working with.

3. Secure individual teaching aids on product information from industry sources, e.g. John Deere Company, Farmland Foods, Purina, etc. Have students study these individually or in small groups.

4. Have students prepare training plans for acquiring the product knowledge competencies required in the occupation in which they are interested - this would be especially relevant if students were enrolled in or preparing to enroll in a Cooperative Vocational Education experience course.

AN EMPLOYEE WORKING IN THE FEED AND GRAIN INDUSTRY SHOULD BE ABLE TO:

1. Determine the basic economics of livestock feeding including: feed costs versus other production costs; feeding as it affects rate of gain, feed efficiency, and market quality; minimal standards for rate of gain and feed efficiency; economic gains resulting from proper use of rations; computing least cost rations; and determining the most profitable level of production.

2. Describe nutrients required for livestock, purposes for which nutrients are used, nutrients required for various classes of livestock, sources of nutrients, and value and use of food additives.

3. Assess the regulations in the formulating, labeling, and using of feeds. The following areas will be considered: state regulations; federal regulations; label requirements and regulations; open formula feeds; and closed formula feeds.

4. Formulate grain and protein rations.

5. Analyze the methods used in preparing feeds such as grinding, crushing, rolling, cracking, mixing, crumbling, and pelleting.

6. Explain the methods used and the common trends in feed merchandising.

7. Describe the methods used and common practices in the buying, selling, handling and warehousing of feed grains.

AN EMPLOYEE WORKING IN THE FERTILIZER AND SEED INDUSTRY SHOULD BE ABLE TO:

1. Describe the economic value of the use of fertilizer and commercial seeds in crop production.

2. Review the life processes of plants, considering: photosynthesis; transpiration; respiration; assimilation; growth and reproduction.

3. Explain the classes of essential soil elements, functions of plant food elements, and factors affecting yields other than plant food elements.

4. Explain how fertilization is affected by basic physical, chemical, and biological properties in soils.

5. Describe the characteristics of commonly used fertilizer materials. Consider nitrogen-carrying materials and their uses, phosphorus-carrying materials and their uses, and potassium-carrying materials and their uses.

6. Explain the following in relation to formulating mixed fertilizers: interpretation of fertilizer formulas; percent of contents, reading fertilizer tags; comparing fertilizer analyses; trace elements; pesticide additives; state regulations; selecting analysis and amounts from an economic standpoint; and principle ratios and grades of mixed fertilizers.

7. Illustrate the different methods used to determine the fertility needs of soils and take soil samples correctly.

8. Interpret a soil test report.

9. Make fertilizer recommendations.

10. Distinguish the methods of handling and storing commercial fertilizers.

11. Interpret seed tags and labels.

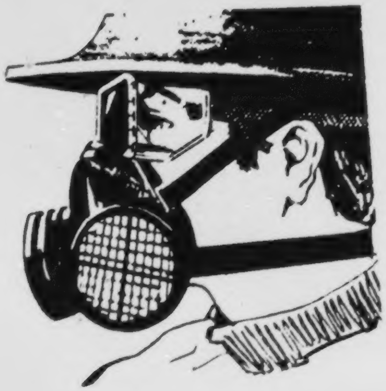
12. Recognize the advantages and disadvantages of soybean, oats, and forage varieties in Iowa.

13. Determine the criteria used in hybrid seed corn selection.

AN EMPLOYEE WORKING IN THE AGRICULTURAL CHEMICALS INDUSTRY SHOULD BE ABLE TO:

1. Describe the importance of agricultural chemicals.
2. Identify the various types of pests in the area and damage done by each. Groups or major areas are: weeds, insects, diseases, rodents, nuisance birds, and nematodes.
3. Explain the responsibility involved in recommending the correct pesticide use. Areas of study are: determining if chemical control is best treatment, factors to consider in selecting the best pesticide, major categories or types of pesticides, characteristics and uses of each type, and nonpesticides and their uses.
4. Outline the factors to be considered in recommending correct practices to follow in the application of pesticides, including: basic factors to consider, forms in which pesticides are available, time of application, methods of application, safety factors to consider, and selecting, using, and calibrating equipment.
5. Analyze information on pesticide labels and other literature pertaining to pesticides.
6. Advise customers in the safe handling, storage, and use of agricultural chemicals.
7. Describe the EPA regulations on handling, storage, use and disposal of agricultural chemicals.

USE PESTICIDES SAFELY

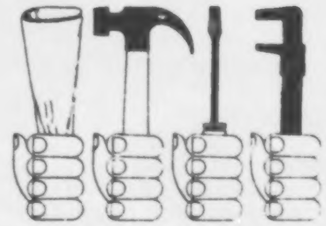


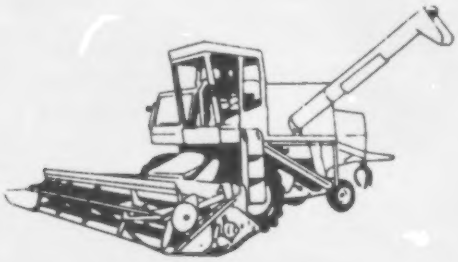
AN EMPLOYEE WORKING IN THE ANIMAL HEALTH INDUSTRY SHOULD BE ABLE TO:

1. Define animal health terms.
2. Assess the uses, advantages and disadvantages of antibiotics.
3. Determine the medications and other feed additives commonly used, the purposes of each, and the precautions necessary when using them.
4. Distinguish the wormer products available for cattle, hogs, sheep, and horses and the conditions where they are used.
5. Interpret those factors necessary to use common products for the treatment and control of external parasites.
6. Make injections properly.
7. Recognize the federal, state, and county regulations regarding the animal health industry.
8. Describe the symptoms shown by diseased and unhealthy animals.

AN EMPLOYEE WORKING IN THE HARDWARE, FARM EQUIPMENT OR LUMBER INDUSTRY SHOULD BE ABLE TO:

1. Utilize terminology used in specifying size, part type, equipment make, model, year, etc.
2. Identify machinery parts, hardware and lumber items from verbal descriptions.
3. Advise customers of machinery parts needed or hardware and lumber items needed.
4. Read and interpret diagrams in parts manuals.
5. Advise customers of related parts, accessories and consumable items that may be needed.
6. Advise customers on procedures for installation of parts.
7. Appraise value of used equipment.
8. Demonstrate equipment operation, adjustment and maintenance.
9. Describe the strong and weak points of competition's equipment.
10. Explain proper procedures and equipment used in carpentry, painting, welding, concrete and masonry work.

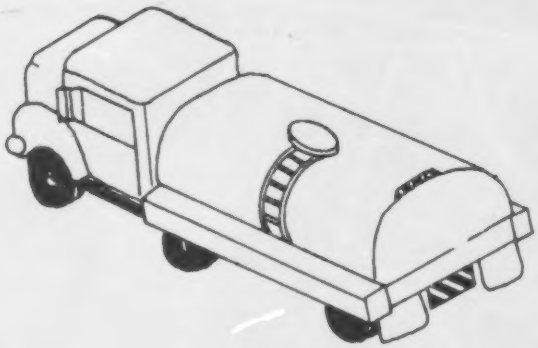




SOURCE: McClay, 1979. National Ag Occupations Competency Study

AN EMPLOYEE WORKING IN THE
PETROLEUM AND PETROLEUM PRODUCTS INDUSTRY
SHOULD BE ABLE TO:

1. Describe the importance of petroleum products in agriculture, current usage, future trends, local practices, and terminology used in reference to petroleums, oils, and lubricants.
2. Select tractor and power equipment fuels correctly.
3. Identify the guidelines for proper storage facilities for tractor fuels on the farm.
4. Select proper motor lubricating oils, gear oils, lubricating greases, and hydraulic oils for farm machinery and equipment.
5. Explain the selection, delivery, and storage of heating oils.
6. Describe products usually available to farmers through petroleum salespersons. Examples are: anti-freeze, tires, batteries, sparkplugs, and V-belts.
7. Appraise the safety laws and regulations pertaining to the delivery and storage of liquid petroleum.
8. Demonstrate the requirements for a chauffeur's license and drive a truck carefully and safely.



UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

Problem Areas Included:

LR-I. Why are laws and regulations important in the agricultural supplies and services industry?

LR-II. Why do I need to know about contracts in the agricultural supplies and services business?

LR-III. What should I know about company liabilities in the agricultural supplies and services business?

LR-IV. What do I need to know about Federal, State and local regulations of agricultural businesses?

LR-V. What do I need to know about laws and regulations pertaining to pesticides?

References:

1. Agricultural Chemicals. 1972. Ohio Agricultural Curriculum Materials Service, The Ohio State University, Columbus, Ohio.

2. Agricultural Chemicals-Herbicides, Lesson 4: Herbidide Application Equipment. 1970. Agricultural Education Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

3. Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. (Student's Handbook and Teacher's Handbook.) Vocational Education Production. California State Polytechnic College, San Luis Obispo, California 93401.

4. Applying Pesticides Correctly: A Guide for Applicators. U.S. Department of Agriculture and U.S. Environmental Protection Agency, Washington, DC.

5. Ashcroft, John and Charles Aldo. 1971. College Law for Businesses, 7th ed. Southwestern Publishing Company, Chicago.

6. Ashman, Henry. Your Legal and Business Matters and How to Care for Them. The John Day Company, New York.

7. Clark, Raymond. 1969. Agricultural Chemicals. Department of Secondary Education and Curriculum, Michigan State University, East Lansing, Michigan.

8. Conyngton, Thomas. Business Law, 3rd ed. The Ronold Press Company, New York.

9. Dykstra, Gerald and Lillian Dykstra. 1960. Business Law: Text and Cases, 2nd ed. Pitman Publishing Corporation, New York.

10. Insecticides. 1973. Ohio Agricultural Education Curriculum Materials Service, The Ohio State University, Columbus, Ohio.

UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

PROBLEM I - Why are laws and regulations important in the agricultural supplies and services industry?

Study Questions:

1. What is business law?
2. Why is business law important?
3. What responsibilities should employees have to employing businesses to comply with regulations?
4. What legal responsibilities must the business have to employees, customers, business associates, and government.
5.
6.

References:

1.
2.
3.

Conclusion: It is important to know the business' legal responsibilities to employees, customers, business associates, and the government to help employing businesses comply with regulations and to avoid acts which will liable and may embarrass the business.

Evaluation: As a result of this lesson, students should be able to:

1. Appraise the responsibilities of employees to help the employing company comply with regulations and avoid acts which would liable and embarrass the company.
2. Evaluate the legal responsibilities of the firm to employees, customers, business associates, and government.

Optional Learning Activities:

1. Invite a lawyer to discuss the importance of business law with the class.
2. Invite an employer to meet the class, or take a field trip to his place of business.
3. List the school rules and regulations and discuss how they are enforced.

UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

PROBLEM II - Why do I need to know about contracts in the agricultural supplies and services business?

Study Questions:

1. What are contracts?
2. Why are contracts important?
3. How are contracts classified?
4. How are contracts prepared and analyzed?
5. What are essential elements of a contract? How are they analyzed?
6. What are the various kinds of contracts?
7. What are written contracts?
8. What are agents?

References:

1.

2.

3.

Conclusion: It is important to become aware of essential elements in the various types of contracts and understand how they are prepared and analyzed.

Evaluation: As a result of this lesson, students should be able to:

1. Interpret definition of terms used in contracts.
2. Analyze the essentials of a contract.
3. Interpret common contracts used in the farm supply and services center such as:
    a. new facility construction and remodeling
    b. formal and simple contracts
    c. enforcibility - valid, void
    d. compliance - executed or executory
    e. reciprocate obligations

Optional Learning Activities:

1. Have students obtain, bring to class, and explain sample contracts.
2. Have a few students work together and prepare a contract. examples may be to prepare an agribusiness lease, purchase agreements, and labor contracts.
3. One or more students obtain information and make a report to the class on collective bargaining. May bring in resource person.

UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

PROBLEM III - What should I know about company liabilities in the agricultural supplies and services business?

Study Questions:

1. Who are liabilities considered for?
2. How are businesses liable for customers proprety while at the place of business; safety of customers while on the premises of the business; safety of employees; and accidents off the premises.
3. Identify situations of product liability laws for the company when dealing with articles sold to customers; injuries to customers while using articles sold by the business; and loss of production on sale due to products sold to the customers.

References:

1.

2.

3.

Conclusion: An employee in an agricultural supplies and services business should know or be knowledgeable of the businesses liabilities for:

1. Customers property while at the place of business.
2. Safety of customers.
3. Safety of employees.
4. Accidents of employees.
5. Injuries to customers due to products sold by the company.

Evaluation: As a result of this lesson, students should be able to:

1. Identify company's liability at the place of business for customer's property, safety of customers, safety of employees, and accidents while on and off the premises.
2. Assess the company's liability for liability laws concerning:
    a. articles sold to customers,
    b. injuries to customers while using articles sold by the firm,
    c. loss of production or sales due to products sold to the customers.

Optional Learning Activities:

1. Have students discuss situations they have had concerning liability laws.
2. If possible, observe a local court trial where liability is involved.
3. Survey offices of the local courthouse to obtain information concerning liability.

UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

PROBLEM IV - What do I need to know about Federal, State and local regulations of agricultural businesses?

Study Questions:

1. What are local zoning laws, building codes, fire regulations, and health laws governing local agricultural businesses.
2. What are State agricultural and market laws in the areas of grading, standards, licensing and labeling which pertain to the farm supply business? Describe.
3. What are State labor laws concerning wage and hours, working conditions, employment insurance, and disability insurance? Interpret each.
4. What are common State health and sanitation laws, motor vehicle laws, and conservation laws? Explain.
5. What Federal laws and regulations are important to the agribusiness firm? Describe.
6. How are laws categorized for agribusiness firms?

References:

1.

2.

3.

Conclusion: To work for or manage a business firm it is important to be familiar with all laws and regulations governed by Federal, State and local government in the categories of commerce, food and drugs, and agricultural and marketing orders to avoid acts that may embarrass the business.

Evaluation: As a result of this lesson, students should:

1. Have a knowledge of local zoning laws, building codes, fire regulations, and health laws governing agricultural businesses.
2. Have an understanding of agricultural marketing laws in the areas of: grading, standards, license, and labeling of farm supply businesses.
3. Understand State labor laws concerning wage and hours, working conditions, employment, and disability insurance.
4. Understand what Federal laws and regulations are important to the agri-business firm.
5. Should have a knowledge of common State health and sanitation laws, motor vehicle laws, and conservation laws.

Optional Learning Activities:

1. Invite a local agribusiness representative to discuss those local, State, and Federal laws important to his/her business.
2. Present court case studies of trials involving local, State or Federal law violations.
3. Role play a trial concerning a violation of a law of laws in this area of study.
4. Have students select a law or regulation, research it and report to the instructor and to the class.
5. Field trip to the State legislature.

UNIT: LAWS AND REGULATIONS AFFECTING AGRICULTURAL BUSINESSES

Problem V - What do I need to know about laws and regulations pertaining to pesticides?

Study Questions:

1. Why is pesticide safety important in the agricultural supplies and services industry?

2. What Federal, State and local government agencies and laws are involved in the regulation of pesticide usage?

3. What do I need to know about laws and regulations on handling pesticides?

4. What do I need to know about laws and regulations on transporting pesticides?

5. What do I need to know about laws and regulations on storing pesticides?

6. What do I need to know about laws and regulations on disposal of pesticides?

7.

8.

References:

1. Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California. (Student's Handbook and Teacher's Handbook)

2. Agricultural Chemicals. 1972. Ohio Agricultural Curriculum Materials Service, The Ohio State University, Columbus, Ohio.

3. Agricultural Chemicals-Herbicides: Lesson 4-Herbicide Application Equipment. 1970. Agricultural Education Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

4. Applying Chemicals Correctly: A Guide for Applicators. USDA and US EPA.

Instructional Materials:

1. "Safe Use of Pesticides" Film No. 6482. Produced by the USDA and the US Food and Drug Administration. Order through Motion Picture Service Office of Inofrmation, USDA, Washington, DC 20250.
2. LR-V-TM-1, What is Labeling?
3. LR-V-TM-2, What is a Label?
4. LR-V-ACT-3, Parts of the Label
5. LR-V-INFO-4, Protect Yourself
6. LR-V-INFO-5, When Will I Need Respiratory Protective Devices?
7. LR-V-INFO-6, Respirators
8. LR-V-INFO-7, Care of Respirators and Gas Masks
9. LR-V-TM-8, Use Only as Directed!
10. LR-V-TM-9, Before Selecting a Pesticide ...
11. LR-V-INFO-10, Read to Find Out
12. LR-V-INFO-11, Before Applying a Pesticide Find Out ...
13. LR-V-INFO-12, Mixing and Loading Pesticides
14. LR-V-INFO-13, How to Mix Chemicals Safely
15. LR-V-INFO-14, How to Apply Chemicals Safely
16. LR-V-INFO-15, After the Application of a Chemical
17. LR-V-INFO-16, When Transporting Pesticides ...
18. LR-V-INFO-17, When Storing Pesticides ...
19. LR-V-INFO-18, Disposal of Empty Pesticide Containers
20. LR-V-INFO-19, The DO's of Pesticide Safety
21. LR-V-INFO-20, The DON'T's of Pesticide Safety
22. LR-V-INFO, Important Pesticide Laws
23. LR-V-TM-22, Important Pesticide Regulatory Agencies

Interest Approach: Start class by having students list on paper several reasons why they feel pesticides and other agricultural chemicals are necessary for modern agriculture. Discuss students' reasons and have students list their reasons on the blackboard.

Learning Activities:

1. Have students read Part I of the Student's Handbook (Reference 1). Discuss the importance of pesticides in conjunction with food quality, cost, crop losses, environment. Encourage students to locate newspaper and magazine articles relating to pesticide laws and regulations throughout the study of this problem area. Students could make a bulletin board featuring these articles.

2. Have a panel discussion on personal safety in handling agricultural chemicals. Possible panelists: an agricultural chemical dealer, county extension agent, farmer, first aid unit member, students, poison control center employee, etc. After the panel discussion, compile a list with the students of what things a person should know about pesticides and the laws and regulations which guide their usage.

3. Collect some labels, facsimilies, etc. for students to work with. View TM-1 and TM-2. Then have students identify: from the label you have handed them the name of the manufacturer, the name of the pesticide (chemical and generic), the active ingredients, etc. Have students complete ACT-3.

4. Invite a game warden or conservationist to participate in a discussion with the class on case studies of pesticides harming the environment. Stress that one must be concerned with protecting oneself (INFO-4, INFO-5, INFO-6, INFO-7) as well as the environment (TM-8).

5. Use TM-9 to discuss pesticide selection. Discuss why it is important for an employee in agricultural supplies and services to be able to give advice and/or locate information on pesticides.

6. Present the correct procedures for mixing and loading pesticides (INFO-12 and INFO-13). Have students go through simulation exercises of mixing a pesticide (use flour or sawdust and water).

7. Divide class into small groups. Have them discuss and make a list of factors they will identify prior to applying a chemical (INFO-10, INFO-11, INFO-14, INFO-15).

8. Discuss safety precautions and regulations in transporting pesticides (INFO-16). Have students outline procedures for reporting and cleaning up spills in transporting pesticides, if newspaper and magazine articles on accidents involving pesticides in transit are available use these as case studies.

9. Issue pesticide label to each student. Have each student identify proper storage requirements from the label. (INFO-17)

10. Take a field trip to a farm or agricultural chemical dealership and observe someone clean equipment and dispose of containers properly. Use INFO-18 to develop some questions for the field trip with the students.

11. Use INFO-19 and INFO-20 to discuss the DO's and DON'T's of pesticide safety.

Conclusion: Have students prepare and present a debate or list the pros and cons of our present system of pesticide regulation. You may want to summarize the agencies and laws involved (TM-21 and TM-22) and point out other facts before students being: For example

- -it requires about 10 years of research and about 1 million dollars to get a new pesticide ready for marketing. How does this affect pesticide usage?
- -American farmers are feeding more than 200 million people.
- -American farmers export $6.7 billion worth of food.
- -U.S. agriculture spends more than $3 billion annually on pesticides.
- -Name some pesticides that have been banned in the U.S.
- -Point out fines and sentences which are possible punishment for misuse of pesticides
- -Many pesticides are petroleum products.
- -At present biological pest control methods are subject to EPA regulations on registration, labeling, etc.

Evaluation: As a result of this lesson students should be able to:

1. Recognize the importance of pesticide safety.
2. Explain proper procedures in handling pesticides.
3. Explain proper procedures in transporting pesticides.

4. Explain proper procedures in storing pesticides.
5. Explain proper procedures in disposal of pesticides.
6. Describe Federal, State and local laws and regulatory agencies which are involved in regulation of pesticide usage.
7.
8.
9.

Optional Learning Activities:

1. Encourage students to bring recent newspaper and magazine articles on environmental pollution to class.
2. Have students imagine how it would feel to be responsible for the death of a co-worker or customer as a result of negligence in handling agricultural chemicals.
3. Introduce and show film on "Safe Use of Pesticides". Discuss the film with students and relate the film to local situations.
4. Provide an opportunity for the students to learn how to put on and adjust protective clothing and gear.
5. Have a student model an entire suit of protective clothing in front of the class. As the student puts on (or takes off) each item, discuss with the class pertinent facts about it.
6. Bring fascimilies, labels and containers from pesticides and have students practice reading labels.
7. Have students make a poster listing important phone numbers to have anywhere where chemicals are used, e.g., closest POISON control center, fire department, police department, extension agent, hospital, ambulance, etc.
8. Have students role play an accident involving pesticides and then have them list the proper procedure to follow if an accident should happen.
9. Have students go through training and obtain certification as general applicators and restricted use applicators if possible. Have students send for training manuals.

WHAT IS LABELING ?

All information you receive about the product from the company or its agents

LABELING INCLUDES:

THE LABEL ON THE PRODUCT

BROCHURES

FLIERS

INFORMATION HANDED OUT BY THE DEALER

WHAT IS A LABEL ?

A LABEL IS:

ALL INFORMATION PRINTED ON OR ATTACHED TO THE PESTICIDE CONTAINER

TO THE MANUFACTURER -

IT IS A LICENSE TO SELL

TO THE GOVERNMENT -

IT IS A MEANS TO CONTROL THE DISTRIBUTION, STORAGE, SALE , USE, AND DISPOSAL OF THE PESTICIDES

TO THE USER-

IT IS THE MAIN SOURCE OF FACTS ON HOW TO USE THE PRODUCT SAFELY, LEGALLY, AND EFFECTIVELY

PARTS OF THE LABEL

Identify the following parts of the label from a chemical label.

A. Brand Name ______________________________

B. Type of Formulation (e.g., liquids, wettable powders, or dusts)

____

C. Common Name ______________________________

D. Ingredient Statement ______________________________

____

E. Net Contents ______________________________

F. Name and Address of Manufacturer ______________________________

____

G. Registration and Establishment Numbers ______________________________

____

H. Signal Words and Symbols (e.g., danger, etc.) ______________________________

____

I. Precautionary Statement ______________________________

____

J. Statement of Practical Treatment ______________________________

____

K. Statement of Use Classification ______________________________

____

L. Direction for Use ______________________________

____

____

PROTECT YOURSELF

Wear protective clothing when handling agricultural chemicals.

Make sure you have:

A. Body Covering (coverall or long sleeve shirt and long legged trousers)

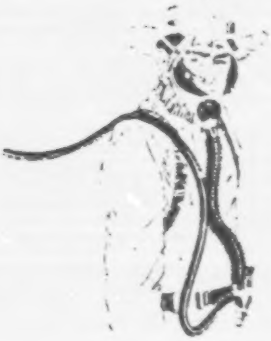
B. Gloves (liquid proof neoprene type)

C. Hat - wide brimmed, waterproof to protect the neck, eyes, mouth and face. Without cloth or leather sweat bands.

D. Boots - wear unlined neoprene boots

E. Care of Clothing - wear clean clothing daily

F. Respiratory Protection Devices
   1. Chemical cartridge respirator
   2. Chemical canister respirator (gas mask)
   3. Supplies air respirator
   4. Self-contained breathing apparatus



WHEN WILL I NEED RESPIRATORY PROTECTIVE DEVICES?

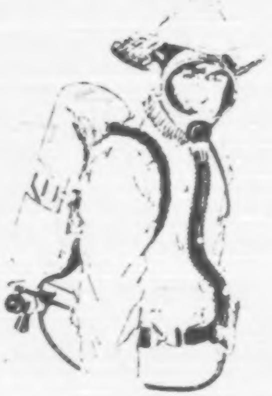
When the label directs you to do so.

When you are to be exposed to a pesticide for a long time.

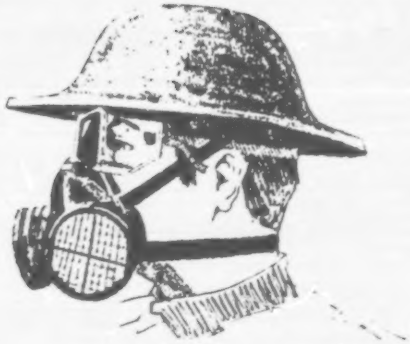
When the pesticide you are to use is highly toxic.

When you are working in an enclosed area.

Source: Applying Pesticides Correctly: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic University.



Self-contained Breathing Apparatus



Cartridge Respirator

RESPIRATORS

Various types of respiratory protective devices: When and how are they used?

Chemical Cartridge Respirator

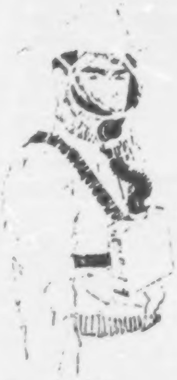
Used when exposed to intermittent concentrations of a toxic pesticide.

Inhaled air comes through both a filter pad and a cartridge made to absorb or remove harmful pesticide vapors, gases and particles.

Chemical Canister Respirator (Gas Mask)

Wear when being exposed to a continuous concentration of a toxic pesticide.

The Canister Respirator has longer-lasting absorbing material and filters than a Cartridge Respirator, and a better gas mask to protect the face. However, neither will protect you when fumigation or the oxygen is low (example: as in a silo).



Canister Respirator

Supplied Air Respirator

Use when mixing or applying pesticides

- when the oxygen supply is low.
- when being exposed to high concentrations of highly toxic pesticides in closed areas, as in fumigation.
- when work can be done close to a supply of fresh air.

Clean air is pumped through a hose to the face mask.

Self-contained Breathing Apparatus

Wear when mixing or applying pesticides.

Has supplied air or oxygen and is carried on your back. This allows you to move freely and over a wider area than with the Supplied Air Respirator.

CARE OF RESPIRATORS AND GAS MASKS

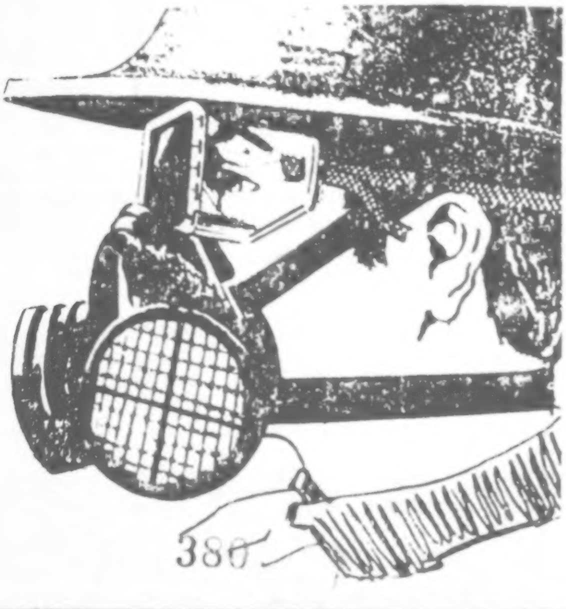
Keep these devices clean. Wash the face pieces (not the filter) with soap and clean water after each use.

Fit the face piece to the face carefully so there is no leakage. Test it before using. Close off the air supply with the palms of the hands and inhale. If it fits properly, the face piece will collapse against the face, and you cannot feel any air coming in around it.

Change the filters as often as recommended. Eight to ten hours of constant use is maximum. Change the filter immediately if you pesticide odor.

Keep gas mask canisters in a dry place and do not use them after the expiration date. Moisture tends to coagulate the protective chemicals in them, so air through them is restricted. Occasionally an old canister will look safe, yet the metal has corroded away, leaving the paint as the only protection for the wearer against lethal poisons.

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California. (Student's Handbook and Teacher's Handbook)

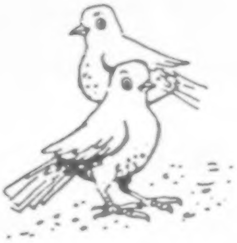


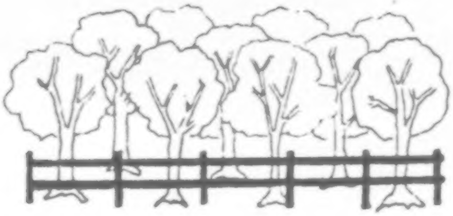
USE ONLY AS DIRECTED !

USE PESTICIDES SAFELY

PESTICIDES CAN

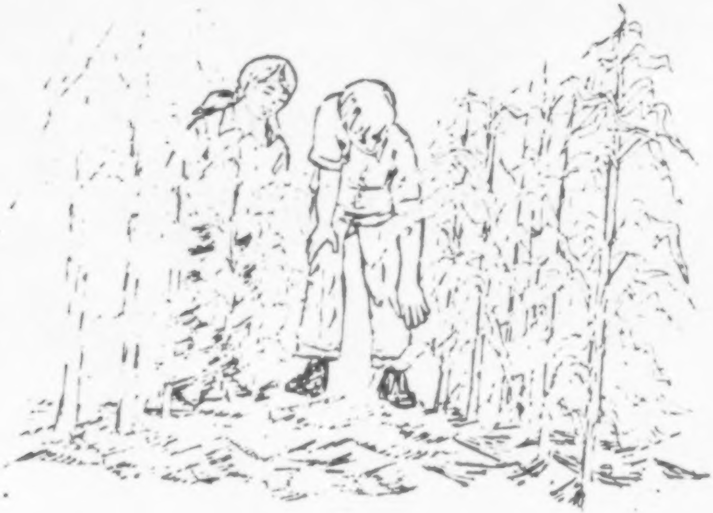
- injure or kill humans
- injure or kill plants and animals
- leave illegal and harmful residues
- upset ecological balance





IT IS ILLEGAL TO USE PESTICIDES EXCEPT AS DIRECTED ON THE LABEL

BEFORE SELECTING A PESTICIDE...



IDENTIFY the pest correctly

DETERMINE if the pest population warrants pesticide treatment

KNOW which pesticides will control the pest in question

COMPARE alternatives

WHEN PURCHASING A PESTICIDE READ TO FIND OUT

It's restriction on use

If it is the correct chemical for the problem

If it can be used safely under your conditions

What environmental precautions are needed

If formulation and amount of ingredients are right for your job

If you have the right equipment to apply it

If you have the right protective clothing and equipment

How much pesticide you need

Source: Apply Pesticides Correctly: A Guide for Commercial Applicators. U.S. Department of Agriculture and U.S. Environmental Protection Agency.

BEFORE APPLYING PESTICIDES FIND OUT

The protective equipment needed to handle the pesticide.

The specific warnings and first aid measures.

What it can be mixed with.

How to mix it.

How much to use.

Safety measures

When to apply to control pest and meet residue tolerances.

How to apply.

The rate of application.

Specific instructions.

WHEN MIXING AND LOADING PESTICIDES

Keep livestock, pets and people out of the mixing and loading area.

Do not work alone, especially at night.

Work outdoors.

Do not work indoors unless you have good lighting and ventilation.

Put on the correct protective clothing and equipment.

Always read the label for directions for mixing.

Use a sharp knife to open paper containers.

When taking pesticide from a container, keep it below eye level.

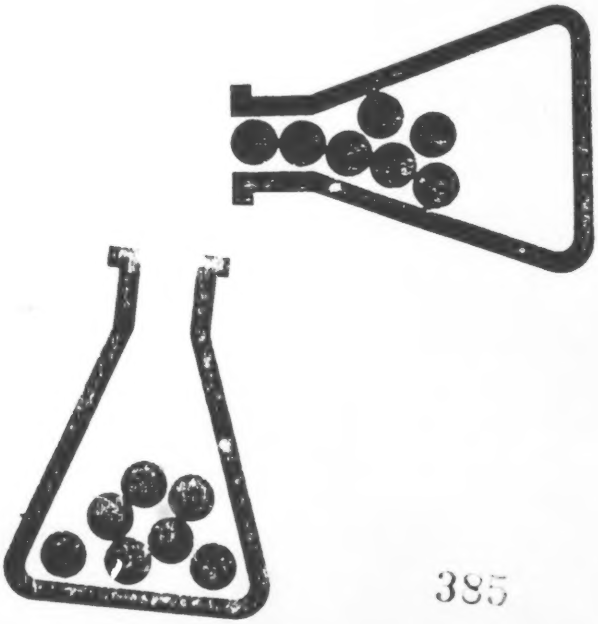
If you splash or spill a pesticide while mixing or loading, you must

- Stop right away
- Remove contaminated clothing
- Quickly wash throughly with detergent and water
- Clean up the spill

When mixing pesticides, measure carefully the amount called for on the label.

When loading pesticides, stand so the wind blows across your body from the right or left to avoid contaminating yourself.

To prevent spills, replace all pour caps and close containers.



HOW TO MIX CHEMICALS SAFELY

A large percent of accidents occur while adding the concentrates into the application equipment. The following procedure will give the worker maximum protection even with the most toxic materials if followed religiously. All containers should be galvanized metal for safety unless plastic or other containers are specified. Many of the toxic pesticides are very corrosive or react with other chemicals, water or some metals. See the label precautions.

Paint all containers bright orange and label "Danger—Poison."

Step 1. Select the best pesticide for the job--the safest chemical which will kill this particular pest on this particular crop without danger to the crop or the consumer. Get help on this from your County Agricultural Commissioner or County Extension Service if needed, and remember the vital importance of correct timing for harvesting a safe crop.

Step 2. Read the label on the pesticide container twice and take care of all preliminary formula calculations, first aid preparations and equipment and training preparations.

Step 3. Calculate again the amount of concentrate to be used for each load.

Step 4. Put on full protective clothing in the prescribed manner.

Step 5. Carefully open original concentrate container.

Step 6. Pour concentrate into the measuring container. Touch the spout of the concentrate container to the edge of the measuring container before you pour the liquid. Replace lid on concentrate container.

Step 7. Carefully pour concentrate into sprayer.

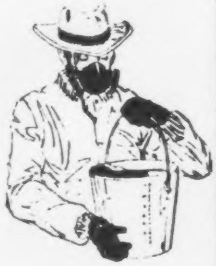
Step 8. Rinse measures. Return concentrates, empty containers, and clean measures to chemical storage room.*

Step 9. Be sure to lock storage room door.

Be sure to:

Always measure concentrates outside in the open air.

Pour liquids carefully to prevent splashing.



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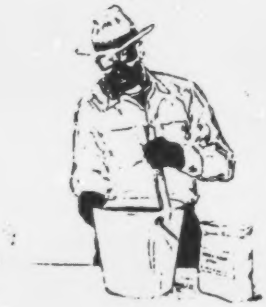
*Commercial neutralizing agents may be used when cleaning contaminated equipment.

Remove the screen on the spray tank before adding the concentrate.

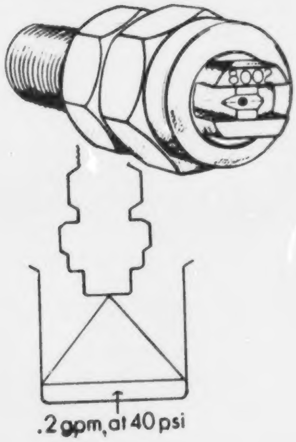
Slurry wettable powders before adding to spray tank.

Avoid incompatible or unknown mixtures of chemicals. (Refer to a compatibility chart.)

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California.



HOW TO APPLY CHEMICALS SAFELY



Have your equipment in good operating condition and properly calibrated.

Make sure there is no leakage.

Keep unnecessary or unauthorized persons out of the area.

Do not apply the chemical if there is danger of drift onto other areas.

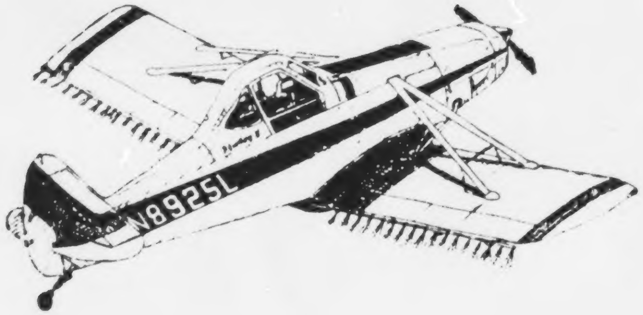
Avoid windy days for any spraying operations. Always spray or dust in the morning (or at night) to avoid "lifting, floating, or drifting effects."

Five miles per hour is maximum velocity for applying dusts. A larger droplet size will reduce drift hazard when spraying.

Keep concentrates away from fire. Some are highly flammable. If they should catch on fire, keep out of the smoke. It may be as dangerous as the chemical itself.

Do not work alone with a hazardous chemical.

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California.



AFTER APPLICATION OF A CHEMICAL

Do not re-enter the area until the chemical has become harmless.

Be Skeptical!
Be Smart!

If there is danger of unauthorized persons entering the treated area, post the field with signs which will warn them of the danger.

When spraying is finished, the spray rig and formulating area should be flushed or rinsed thoroughly. Commerical neutralizing agents may be of value.

Lock up the concentrate. Post a red warning sign on storage area which states "Danger—Poison storage area—unauthorized persons keep out."

Keep all unauthorized people away from the formulating area.

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California.

WHEN TRANSPORTING PESTICIDES

Carry in the back of a truck.

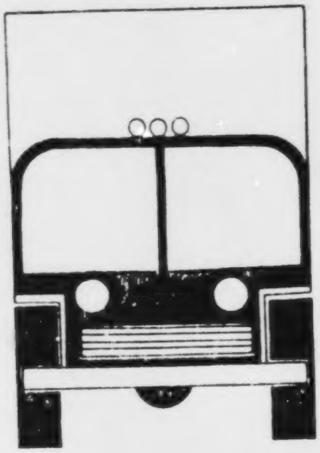
Fasten down all containers to prevent breakage and spillage.

Keep it away from food, feed and passengers.

Keep paper and cardboard packaged dry.

If spilled in or from the vehicle, clean it up right away.

Do not leave unlocked pesticides unattended.



WHEN STORING PESTICIDES

Store in a locked and posted place away from children and other untrained persons.

Store in a place that is dry, cool and out of direct sunlight.

Provide enough insulation to keep chemicals from freezing or overheating.

The storage place should have:

-fire resistant construction, including a cememt floor;
-an exhaust fan for ventilation;
-good lighting;
-a lock on the door at all times.

Store away from where people and animals live.

Store in original containers.

Check containers often for leaks and breaks.

Keep up-to-date inventory of pesticides you have.

Do not store near food, feed, seed or animals.

DISPOSAL OF EMPTY PESTICIDE CONTAINERS

No pesticide container is completely empty. Even the small amount left in a can could be fatal to a child. In many cases the fumes from open containers are toxic, especially on hot days.

KEEP OUT
of REACH of
CHILDREN

To safely dispose of empty containers: Make sure the container is as empty as you can make it; do not reuse pesticide containers; select a disposal area away from home, wells, streams, and livestock. Put a fence around the area and place signs on the fence stating "DANGER—Poison Disposal Area—All unauthorized persons keep out." Break glass containers, punch holes or collapse metal containers; bury at least three feet deep (deeper in sandy soils). Burn all paper bags, keeping out of the smoke; it is poisonous also. (From USDA Agricultural Research Service Leaflet, "Safe Disposal of Empty Pesticide Containers and Surplus Pesticides." August 1964.)

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California.

READ THE LABEL !

GENERAL DO'S OF PESTICIDE SAFETY

DO avoid inhaling sprays and dusts.

DO use proper protective clothing.

DO read the label each time you use the chemical.

DO keep pesticides out of the reach of children or uninformed persons.

DO lock up pesticides and post warning signs to keep unauthorized persons away.

DO store in original containers. Never store in some common container such as a coke bottle or beverage can.

DO wash with soap and water after application and change into clean clothing.

DO cover food and water when there is danger of them becoming contaminated by the chemical.

DO dispose of empty containers in the prescribed manner.

DO burn pesticide sacks and keep out of the smoke.

DO, if you feel ill, see your doctor immediately.

DO check with your doctor before you work with hazardous pesticides.

DO follow first aid procedure immediately if you spill dangerous concentrate on your skin or clothing.

DO instruct all workers on what chemical they are working with and the hazards involved. Give each a reminder card of first aid musts.

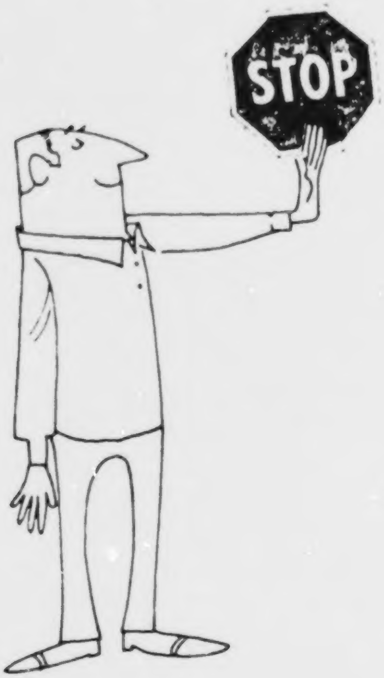
DO make sure each worker understands you. If necessary use the worker's language. Repeat the instructions until the worker thoroughly understands you.

DO keep concentrates away from open flame. Many of them are highly inflammable.

Use the right chemical in the right amount, on the right crop at the right time. IF YOU ARE EVER IN DOUBT ABOUT ANYTHING PERTAINING TO AGRICULTURAL CHEMICAL SAFETY, SEE YOUR COUNTY AGRICULTURAL COMMISSIONER. HE, TOO, WANTS TO PREVENT AGRICULTURAL CHEMICAL ACCIDENTS.

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production. California State Polytechnic College, San Luis Obispo, California.

GENERAL DON'TS OF PESTICIDE SAFETY



DO NOT smoke or eat when spraying or dusting.

DO NOT re-enter treated areas until the chemical has dissipated.

DO NOT allow workers to work alone when using the more toxic materials.

DO NOT mix chemicals in an enclosed room.

DO NOT allow anyone to sleep, eat or lounge in a room where toxic chemicals are stored.

DO NOT permit the delivery of pesticides unless a responsible representative or employee is on hand to receive and properly store them.

DO NOT allow children to play in an area where toxic chemicals are stored, disposed of, or formulated.

Source: Agricultural Chemical Safety: A Guide to Safe Handling of Pesticides. Vocational Education Production, California State Polytechnic College, San Luis Obispo, California.

IMPORTANT PESTICIDE LAWS

1910 Insecticide Act

1938 Federal Food, Drug and Cosmetic Act

1954 Miller Pesticide Chemical Amendment to the 1938 Act

1972 Federal Insecticide, Fungicide and Rodenticide Act, as Amended FIFRA

-requires that all pesticide uses must be classified as either general or restricted.

-requires that certification of pesticide applicators as competent to use any pesticides classified for restricted use.

-provides penalties (fines and jail terms) for people who do not obey the law.

This law prohibits several things:

You may NOT use a pesticide other than as the label or labeling directs except when special regulations allow you to use it at a lower rate than the label recommends.

You may NOT dispose of any pesticide or its container except as the label or labeling directs.

AGENCIES INVOLVED in PESTICIDE REGULATION

EPA	Environmental Protection Agency
DOT	Department of Transportation
FDA	Food and Drug Administration
FAA	Federal Aviation Administration
USDA	US Department of Agriculture
OSHA	Occupational Safety and Health Administration

State Departments of Agriculture

county level agricultural commissions

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